

Grizzly *Industrial, Inc.*®

MODEL G0482 22" DRILL PRESS OWNER'S MANUAL



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#JK7824 PRINTED IN CHINA

 **WARNING!**

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

Failure to read, understand and follow the instructions given in this manual may result in serious personal injury, including amputation, electrocution or death.

The owner of this machine/equipment is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, blade/cutter integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

 **WARNING!**

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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INTRODUCTION

Foreword

We are proud to offer the Model G0482 22" Drill Press. This machine is part of a growing Grizzly family of fine machinery. When used according to the guidelines set forth in this manual, you can expect years of trouble-free, enjoyable operation and proof of Grizzly's commitment to customer satisfaction.

We are pleased to provide this manual with the Model G0482. It was written to guide you through assembly, review safety considerations, and cover general operating procedures. It represents our effort to produce the best documentation possible.

The specifications, drawings, and photographs illustrated in this manual represent the Model G0482 as supplied when the manual was prepared. However, owing to Grizzly's policy of continuous improvement, changes may be made at any time with no obligation on the part of Grizzly. For your convenience, we always keep current Grizzly manuals available on our website at **www.grizzly.com**. Any updates to your machine will be reflected in these manuals as soon as they are complete. Visit our site often to check for the latest updates to this manual!

Contact Info

If you have any comments regarding this manual, please write to us at the address below:

Grizzly Industrial, Inc.
c/o Technical Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069

We stand behind our machines. If you have any service questions or parts requests, please call or write us at the location listed below.

Grizzly Industrial, Inc.
1203 Lycoming Mall Circle
Muncy, PA 17756
Phone: (570) 546-9663
Fax: (800) 438-5901
E-Mail: techsupport@grizzly.com
Web Site: <http://www.grizzly.com>





MACHINE DATA SHEET

Customer Service #: (570) 546-9663 • To Order Call: (800) 523-4777 • Fax #: (800) 438-5901

MODEL G0482 22" DRILL PRESS

Product Dimensions:

Weight.....322 lbs.
Length/Width/Height31-1/2 x 22-7/8 x 69-5/8 in.
Foot Print (Length/Width)31-1/2 x 22-7/8 in.

Shipping Dimensions Box 1:

Type..... Cardboard
Content Headstock
Weight.....150 lbs.
Length/Width/Height33-1/8 x 20-1/2 x 12-5/8 in.

Shipping Dimensions Box 2:

Type..... Cardboard
Content Table and Base
Weight.....148 lbs.
Length/Width/Height26-3/4 x 22 x 12-5/8 in.

Shipping Dimensions Box 3:

Type..... Cardboard
Content Column
Weight.....44 lbs.
Length/Width/Height57-7/8 x 7-1/2 x 7-1/2 in.

Electrical:

Switch Toggle On/Off with Safety Lock Tab
Switch Voltage 220V
Cord Length 5 ft.
Cord Gauge 14 gauge
Recommended Breaker Size..... 15 amp
Plug.....NEMA 5-15

Motors:

Main

Type TEFC Capacitor Start Induction
Horsepower..... 1-1/2 HP
Voltage.....110V/220V
Prewired..... 110V
Phase..... Single
Amps..... 15/7.5A
Speed 1725 RPM
Cycle.....60 Hz



Number Of Speeds	1
Power Transfer	V-Belt Drive
Bearings	Shielded and Lubricated

Main Specifications:

Construction

Table Construction	Precision Ground Cast Iron
Spindle Housing Construction	Cast Iron
Column Construction	Cylindrical Ground Steel
Head Construction	Cast Iron
Base Construction	Cast Iron
Paint	Epoxy

Head Information

Head Swivel	360 deg.
-------------------	----------

Other Related Information

Base Length	22-1/2 in.
Base Width	19-5/8 in.
Quill Diameter	3 in.
Depth Stop Type	Threaded Rod with Positive Stop
Column Diameter	3-5/8 in.
Illumination	110V Socket w/ Separate Switch

Spindle Information

Spindle Taper	MT#4
Spindle Travel	4-5/8 in.
Dist From Spindle To Column	11 in.
Dist From Spindle To Table	26-3/4 in.
Dist From Spindle To Base	48 in.

Table Information

Table Length	18-3/4 in.
Table Width	16-1/2 in.
Table Thickness	1-1/2 in.
Floor To Table Height	23-1/4 in.
Vertical Table Movement	Crank Handle Operated
Table Swing	360 deg.
Table Tilt	Left and Right 45 deg., total 90 deg.
Table Swivel Around Column	360 deg.
Maximum Movement Of Work Table	360 deg.
No. Of T Slots	6
T Slot Width	17mm
T Slot Length	7-7/8", 6-3/4", 5-3/4" (Two slots each size)

Operation Information

Swing	22 in.
Drilling Capacity	1 in. in Steel
No Of Spindle Speeds	12
Range Of Spindle Speeds	180, 300, 330, 460, 530, 560, 1150, 1360, 1610, 1940, 2400, 3440 RPM
Drill Chuck Type	JT3 Keyless Chuck
Drill Chuck Size	5/8 in.



Other Specifications:

Country Of Origin China
Warranty 1 Year
Serial Number Location Data Label on Headstock
Assembly Time 45 minutes

Features:

..... Crank Handle Operated Rack and Pinion Vertical Table Movement
..... Threaded Depth Stop
..... Includes Built-in Light
..... 1-1/2 HP Motor
..... 5/8" Keyless Chuck

Specifications, while deemed accurate, are not guaranteed.



Identification

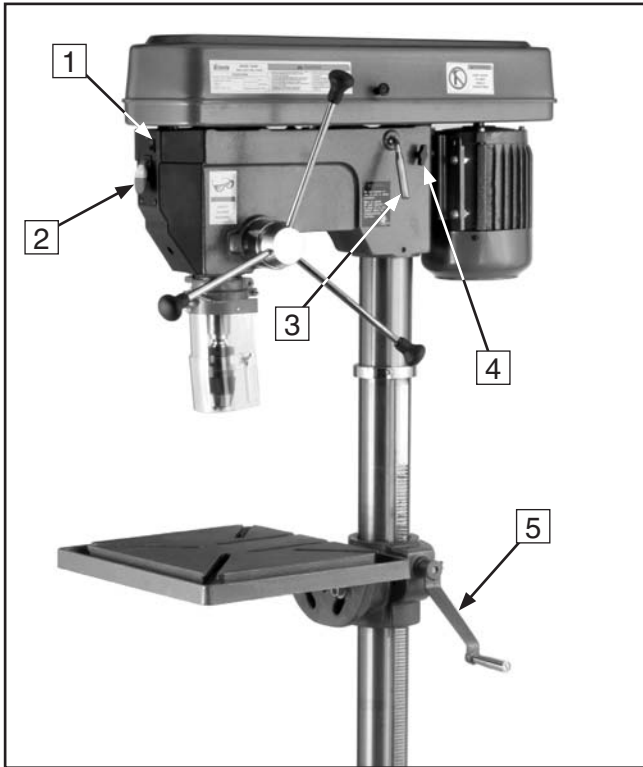


Figure 1. Right-side controls.

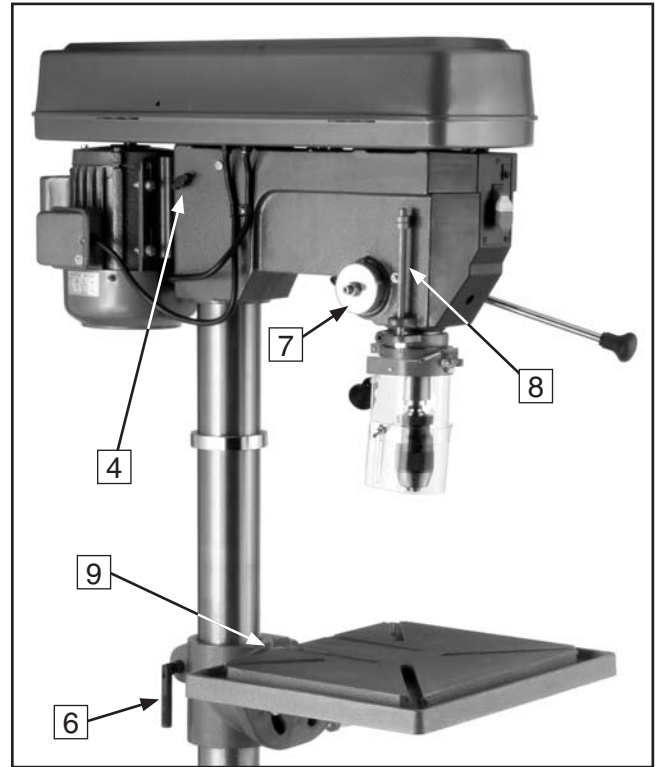


Figure 2. Left-side controls.

Refer to the list below and see **Figures 1 & 2** to become familiar with the drill press controls.

1. **Light Switch:** Turns 110V light **ON/OFF**.
2. **Power Switch:** Turns motor **ON/OFF**.
3. **Belt Tension Lever:** Adjusts motor location to increase/decrease belt tension.
4. **Belt Tension Lock:** Locks motor in place.
5. **Table Height Crank:** Raises/lowers table.
6. **Table Lock Lever:** Locks table rotation and height.
7. **Torsion Spring:** Returns quill into headstock.
8. **Depth Stop:** Limits quill travel to a pre-set drilling depth.
9. **Scale:** Displays current table-tilt angle.

Refer to the list below to become familiar with these drill press terms and definitions.

Headstock: The cast iron upper portion of the drill press which houses the quill and work light, and supports the motor and belt housing.

Drift Key: A wedge-shaped tool used to separate tapers.

T-Slot: A slot in a table used to clamp down a workpiece or a vise.

Arbor: A tapered shaft that connects the chuck to the spindle.

Quill: Houses the spindle and bearings.

Spindle: The hollow shaft that accepts the arbor.



SECTION 1: SAFETY


WARNING

For Your Own Safety, Read Instruction Manual Before Operating this Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words which are intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.

 **DANGER** Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.

 **WARNING** Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.

 **CAUTION** Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE This symbol is used to alert the user to useful information about proper operation of the machine.

WARNING

Safety Instructions for Machinery

- 1. READ THROUGH THE ENTIRE MANUAL BEFORE STARTING MACHINERY.** Machinery presents serious injury hazards to untrained users.
- 2. ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING MACHINERY.** Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
- 3. ALWAYS WEAR A NIOSH APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST.** Wood dust is a carcinogen and can cause cancer and severe respiratory illnesses.
- 4. ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY.** Machinery noise can cause permanent hearing damage.
- 5. WEAR PROPER APPAREL. DO NOT** wear loose clothing, gloves, neckties, rings, or jewelry which may get caught in moving parts. Wear protective hair covering to contain long hair and wear non-slip footwear.
- 6. NEVER OPERATE MACHINERY WHEN TIRED, OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Be mentally alert at all times when running machinery.



WARNING

Safety Instructions for Machinery

7. **ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY.** Make sure operation instructions are safe and clearly understood.
8. **KEEP CHILDREN AND VISITORS AWAY.** Keep all children and visitors a safe distance from the work area.
9. **MAKE WORKSHOP CHILD PROOF.** Use padlocks, master switches, and remove start switch keys.
10. **NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power **OFF** and allow all moving parts to come to a complete stop before leaving machine unattended.
11. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.
12. **KEEP WORK AREA CLEAN AND WELL LIT.** Clutter and dark shadows may cause accidents.
13. **USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE.** Undersized cords overheat and lose power. Replace extension cords if they become damaged. DO NOT use extension cords for 220V machinery.
14. **ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY.** Make sure switch is in OFF position before reconnecting.
15. **MAINTAIN MACHINERY WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.**
17. **REMOVE ADJUSTING KEYS AND WRENCHES.** Make a habit of checking for keys and adjusting wrenches before turning machinery **ON**.
18. **CHECK FOR DAMAGED PARTS BEFORE USING MACHINERY.** Check for binding and alignment of parts, broken parts, part mounting, loose bolts, and any other conditions that may affect machine operation. Repair or replace damaged parts.
19. **USE RECOMMENDED ACCESSORIES.** Refer to the instruction manual for recommended accessories. The use of improper accessories may cause risk of injury.
20. **DO NOT FORCE MACHINERY.** Work at the speed for which the machine or accessory was designed.
21. **SECURE WORKPIECE.** Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.
22. **DO NOT OVERREACH.** Keep proper footing and balance at all times.
23. **MANY MACHINES WILL EJECT THE WORKPIECE TOWARD THE OPERATOR.** Know and avoid conditions that cause the workpiece to "kickback."
24. **ALWAYS LOCK MOBILE BASES (IF USED) BEFORE OPERATING MACHINERY.**
25. **BE AWARE THAT CERTAIN DUST MAY BE HAZARDOUS** to the respiratory systems of people and animals, especially fine dust. Make sure you know the hazards associated with the type of dust you will be exposed to and always wear a respirator approved for that type of dust.



WARNING

Additional Safety for Drill Presses

- 1. EYE/FACE/HAND PROTECTIVE WEAR.** A face shield used with safety glasses is recommended. Always keep hands and fingers away from the drill bit. Never hold a workpiece by hand while drilling! **DO NOT** wear gloves when operating the drill.
- 2. GUARD.** Keep chuck guard installed at all times. Operating the drill press without the chuck guard installed can present a risk of serious entanglement injuries.
- 3. SECURING BIT.** Properly tighten and securely lock the drill bit in the chuck.
- 4. USING CORRECT BIT.** Use only round, hex, or triangular shank drill bits.
- 5. ADJUSTING KEYS AND WRENCHES.** Remove all adjusting keys and wrenches before turning the machine **ON**.
- 6. DRILLING SHEET METAL.** Never drill sheet metal unless it is securely clamped to the table.
- 7. PERPARING SURFACE/WORKPIECE.** Never turn the drill press **ON** before clearing the table of all objects (tools, scrap wood, etc.) Always use a suitable support for workpieces with no flat surfaces.
- 8. AVOIDING TOOL INJURIES.** Never use drill bits in poor condition. Dull or damaged drill bits are hard to control and may cause serious injury.
- 9. OPERATING DRILL.** Never start the drill press with the drill bit pressed against the workpiece. Feed the drill bit evenly into the workpiece. Back the bit out frequently to clear deep holes.
- 10. CLEARING CHIPS.** Turn the machine **OFF** and clear chips and scrap pieces with a brush. Shut power **OFF**, remove drill bit, and clean table before leaving the machine.
- 11. OPERATING SPEED.** Always operate your drill press at speeds that are appropriate for the drill bit size and the material that you are drilling.
- 12. MOUNTING WORKPIECES.** Use clamps or vises to secure workpiece before drilling. Position work so you avoid drilling into the table.
- 13. LOCKING TABLE.** Make sure the table lock is tightened before starting the drill press.
- 14. AVOIDING ENTANGLEMENT.** Never change speeds or do maintenance with the machine plugged in.
- 15. EXPERIENCING DIFFICULTIES.** If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact our Technical Support at (570) 546-9663.

WARNING

Like all machines there is danger associated with this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

CAUTION

No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or poor work results.



SECTION 2: CIRCUIT REQUIREMENTS

110/220V Operation

⚠ WARNING

Serious personal injury could occur if you connect the machine to the power source before you have completed the set up process. **DO NOT** connect the machine to the power source until instructed to do so.

Amperage Draw

The Model G0482 features a 110/220V motor that is prewired for 110V and draws the following amps under maximum load:

Motor Draw at 110V 15 Amps
Motor Draw at 220V 7.5 Amps

Circuit Requirements

We recommend connecting this machine to a dedicated circuit with a verified ground, using the circuit breaker size given below. Never replace a circuit breaker with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes. **If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, you may create a fire hazard—consult a qualified electrician to reduce this risk.**

110V Circuit Breaker 20 Amps
220V Circuit Breaker 15 Amps

Plug Type

The cord set enclosed does not have a plug as the style of plug you require will depend upon the type of service you currently have or plan to install. We recommend using the following plugs for your machine on a dedicated circuit only (see **Figures 4 & 3** for an example):

110V Plug & Receptacle 5-20
220V Plug & Receptacle 6-15

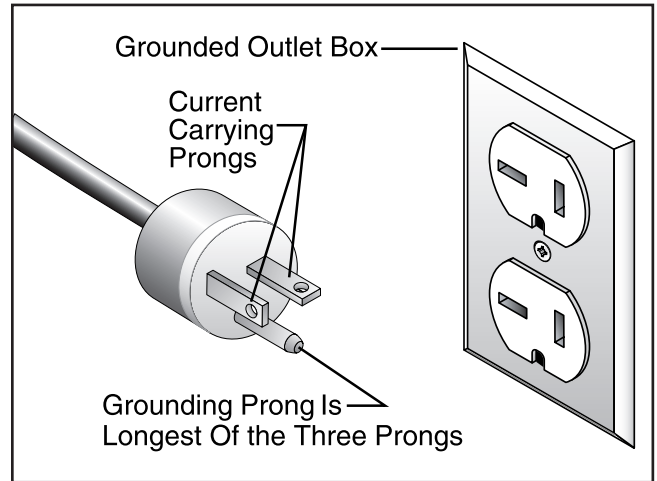


Figure 3. 5-20 plug and receptacle for 110V.

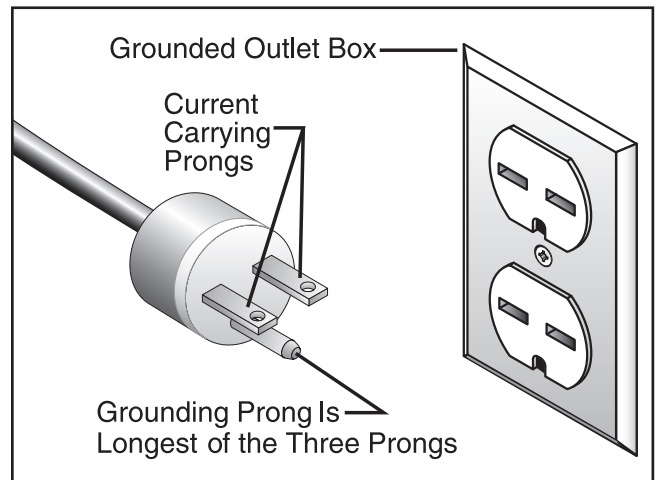


Figure 4. 6-15 plug and receptacle for 220V.

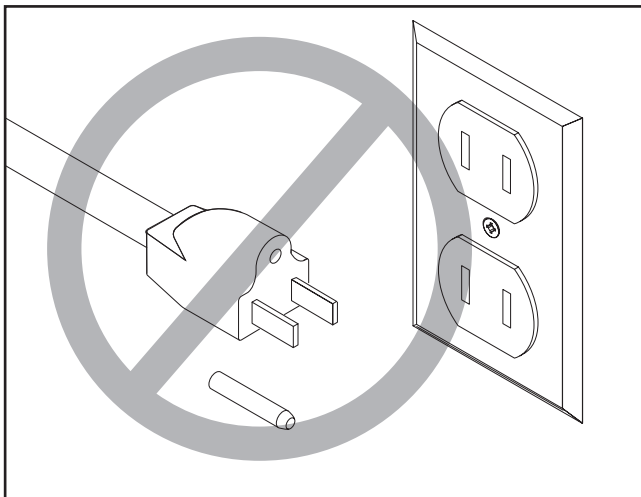
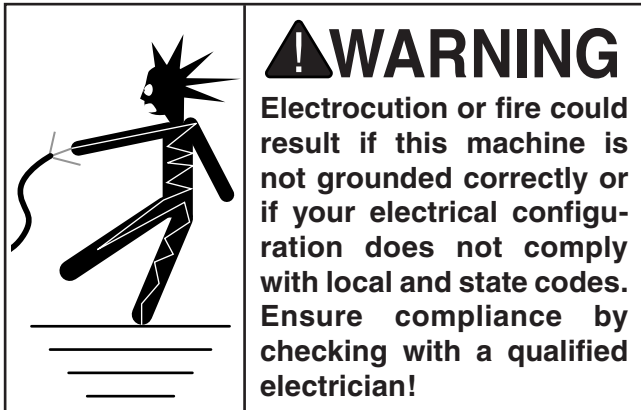
⚠ CAUTION

Using light bulbs at 220V will destroy or explode the light bulbs because the light socket is not wired or intended to be wired for 220V.



Grounding

In the event of an electrical short, grounding reduces the risk of electric shock. The grounding wire in the power cord must be properly connected to the grounding prong on the plug; likewise, the outlet must be properly installed and grounded. All electrical connections must be made in accordance with local codes and ordinances.



⚠️ CAUTION

This machine must have a ground prong in the plug to help ensure that it is grounded. **DO NOT** remove ground prong from plug to fit into a two-pronged outlet! If the plug will not fit the outlet, have the proper outlet installed by a qualified electrician.

Extension Cords

110V Operation

We do not recommend the use of extension cords. Instead, arrange the placement of your equipment and the installed wiring to eliminate the need for extension cords.

If you find it absolutely necessary to use an extension cord at 110V with your machine:

- Use at least a 12 gauge cord that does not exceed 50 feet in length!
- The extension cord must also contain a ground wire and plug pin.
- A qualified electrician **MUST** size cords over 50 feet long to prevent motor damage.

220V Operation

We do not recommend the use of extension cords. Instead, arrange the placement of your equipment and the installed wiring to eliminate the need for extension cords.

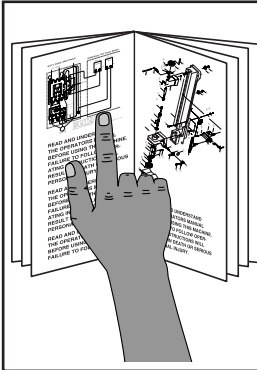
If you find it absolutely necessary to use an extension cord at 220V with your machine:

- Use at least a 14 gauge cord that does not exceed 50 feet in length!
- The extension cord must also contain a ground wire and plug pin.
- A qualified electrician **MUST** size cords over 50 feet long to prevent motor damage.

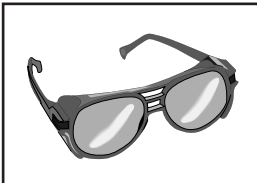


SECTION 3: SET UP

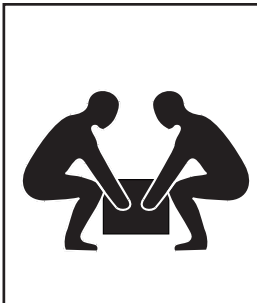
Set Up Safety



!WARNING
This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before starting the machine!



!WARNING
Wear safety glasses during the entire set up process!



!WARNING
The Model G0482 is a heavy machine. DO NOT over-exert yourself while unpacking or moving your machine—get assistance.

Items Needed for Set Up

The following items are needed to complete the set up process, but are not included with your machine:

Description	Qty
• Open-End Wrench 14mm	1
• Open-End Wrench 19mm	1
• Open-End Wrench 22mm	1
• An Assistant (for lifting)	1
• Plumb Bob.....	1
• Ruler.....	1
• Permanent Marker.....	1
• 60W Light Bulb (for 110V operation).....	1
• Phillips Head Screwdriver #2	1
• Degreaser.....	As needed
• Shop towels.....	As needed

Unpacking

The Model G0482 was carefully packed when it left our warehouse. If you discover the machine is damaged after you have signed for delivery, please immediately call Customer Service at (570) 546-9663 for advice.

Save the containers and all packing materials for possible inspection by the carrier or its agent. Otherwise, filing a freight claim can be difficult.

When you are completely satisfied with the condition of your shipment, you should inventory the contents.



Inventory

After all the parts have been removed from the three boxes, you should have the following items:

Large Components (Figure 5)		Qty
A.	Headstock (Box 1).....	1
B.	Table (Box 2).....	1
C.	Base (Box 2).....	1
D.	Table Bracket (Box 2).....	1
E.	Column (Box 3).....	1

Small Components (Figure 6):

A.	Arbor.....	1
B.	Chuck.....	1
C.	Column Lock Handle.....	1
D.	Table Crank Handle.....	1
E.	Drift Key.....	1
F.	Downfeed Handles.....	3
G.	Downfeed Handle Knobs.....	3
H.	Belt Cover Knob (not shown).....	1
I.	Chuck Guard (not shown).....	1

Tools and Hardware:

- Hex Wrench 3mm..... 1
- Hex Wrench 5mm..... 1
- Hex Bolts M12-1.75 x 50 (Column/Base)... 3
- Lock Washers 12mm (Column/Base)..... 3
- Hex Nuts M14-2 (Table)..... 2
- Flat Washers 14mm (Table)..... 2

In the event that any nonproprietary parts are missing (e.g. a nut or a washer), we would be glad to replace them, or for the sake of expediency, replacements can be obtained at your local hardware store.

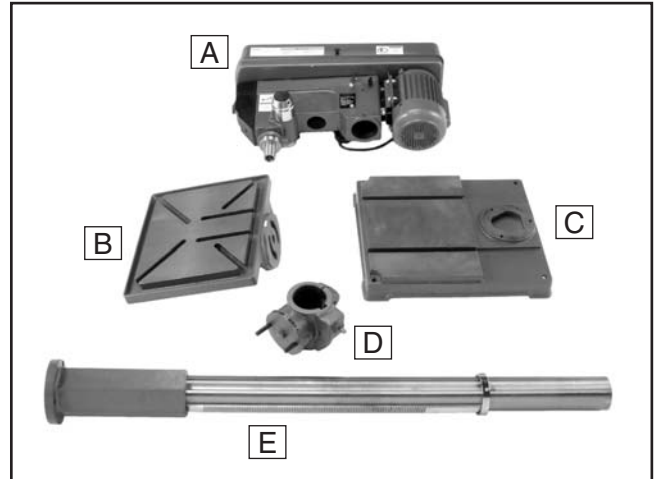


Figure 5. Large component inventory.

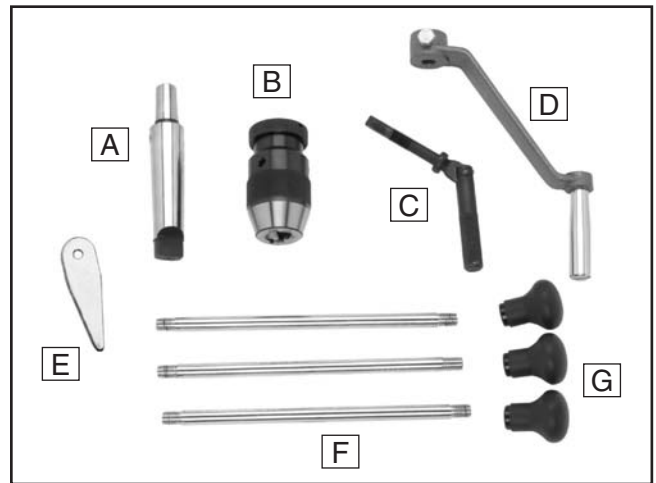


Figure 6. Small component inventory.


NOTICE

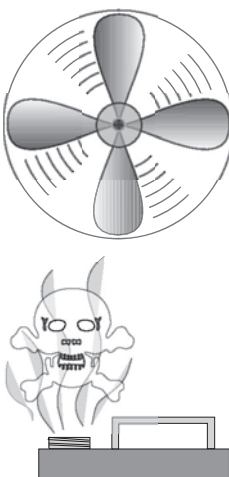
Some hardware/fasteners on the inventory list may arrive pre-installed on the machine. Check these locations before assuming that any items from the inventory list are missing.



Clean Up

The unpainted surfaces are coated with a waxy oil to protect them from corrosion during shipment. Remove this protective coating with a solvent cleaner or citrus-based degreaser such as Grizzly's G7895 Degreaser. To clean thoroughly, some parts may need to be removed. **For optimum performance from your machine, make sure you clean all moving parts or sliding contact surfaces that are coated.** Avoid chlorine-based solvents, such as acetone or brake parts cleaner, as they will damage painted surfaces should they come in contact. Always follow the manufacturer's instructions when using any type of cleaning product.

	<p>⚠ WARNING Gasoline and petroleum products have low flash points and could cause an explosion or fire if used to clean machinery. DO NOT use gasoline or petroleum products to clean the machinery.</p>
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	<p>⚠ CAUTION Many of the solvents commonly used to clean machinery can be toxic when inhaled or ingested. Lack of ventilation while using these solvents could cause serious personal health risks or fire. Take precautions from this hazard by only using cleaning solvents in a well ventilated area.</p>
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Site Considerations

Floor Load

Refer to the **Machine Data Sheet** for the weight and footprint specifications of your machine. Some residential floors may require additional reinforcement to support both the machine, workpiece, and operator.

Working Clearances

Consider existing and anticipated needs, size of material to be processed through each machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your new machine. See **Figure 7** for the minimum working clearances for the Model G0482.

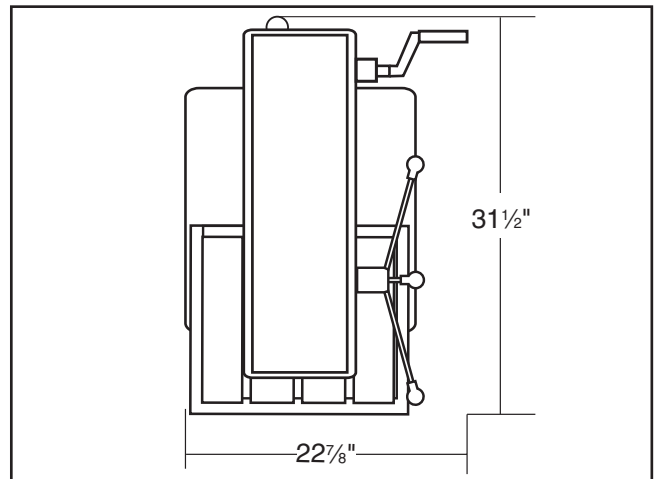


Figure 7. Model G0482 working clearances.

	<p>⚠ CAUTION Unsupervised children and visitors inside your shop could cause serious personal injury to themselves. Lock all entrances to the shop when you are away and DO NOT allow unsupervised children or visitors in your shop at any time!</p>
--	---



Column and Base

Components and Hardware Needed:	Qty
Base	1
Column	1
Hex Bolts M12-1.75 x 50	3
Lock Washer 12mm	3

To install the column on the base:

1. Place the column on the base and align the holes in the column with the mounting holes in the base.
2. Secure the column to the base with hex bolts and lock washers, as shown in **Figure 8**.

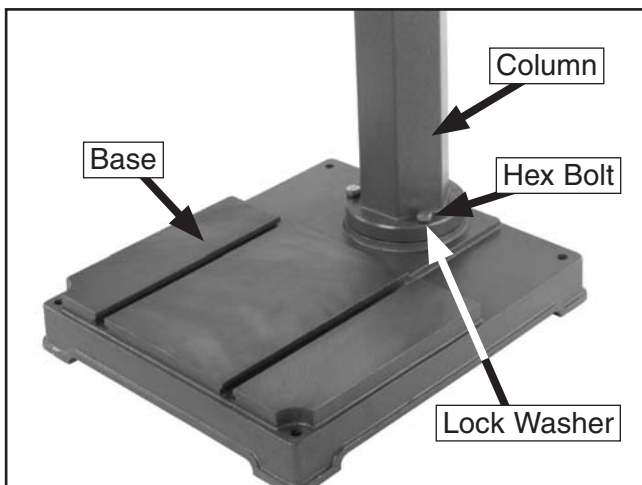


Figure 8. Mounting the column.

Table Bracket

The rack and collar are pre-installed on the column, and need to be removed before the table bracket can be installed.

Components and Hardware Needed:	Qty
Table Bracket	1

To install the table bracket:

1. Mark the top of the rack, as shown in **Figure 9**, to reference which end is the top. Visually, the top of the rack is the end with a larger 'blind', or untoothed, section.

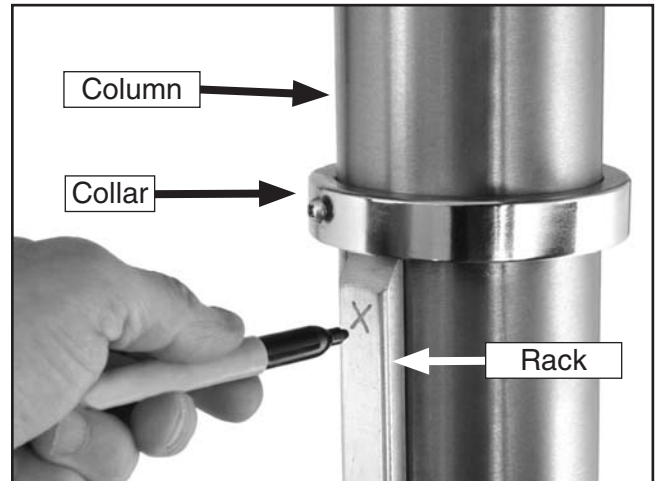


Figure 9. Marking the rack.

2. Loosen the screw on the collar and remove the collar and rack from the column.
3. Place the rack inside the table bracket, engage it with the gear inside the table bracket, and slide the rack and table bracket onto the column, as shown in **Figure 10**.

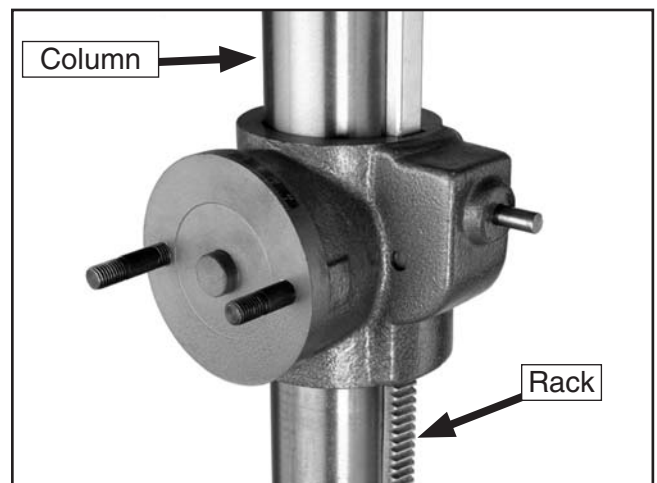


Figure 10. Table bracket installed on column.

4. Re-install the collar and tighten the collar screw.



Crank and Column Lock Handles

Components and Hardware Needed:	Qty
Table Crank Handle.....	1
Column Lock Handle.....	1

To install the crank handle and column lock handle (Figure 11):

1. Remove the hex bolt from the crank handle.
2. Slide the crank handle onto the handle shaft, and turn the handle until the bolt hole is aligned with the flat face of the handle shaft.
3. Re-insert and tighten the hex bolt.
4. Insert the column lock handle into the non-threaded hole at the left rear of the table bracket, and thread it through to the right side of the table bracket.

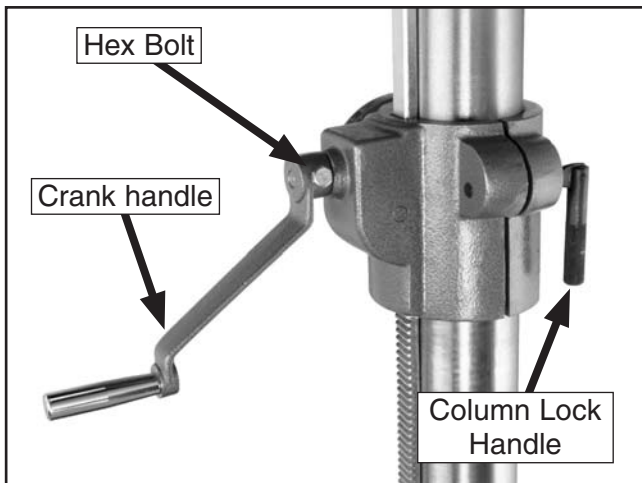



Figure 11. Attaching the crank handle.

Headstock

Components and Hardware Needed:	Qty
Headstock	1

The headstock must be mounted on the column/base assembly before the drill press can be operated. Moving and installing the headstock is a two-person job, at the very least. Although the headstock can be lifted directly onto the column while upright, doing so is difficult and potentially dangerous because of the heavy weight involved. We recommend sliding the column into the headstock, then tilting the entire assembly fully upright, as described and shown in this section.

	<p>!WARNING</p> <p>The headstock is very heavy. You MUST have assistance when moving, lifting or mounting the headstock on the column and base assembly.</p>
--	--

To mount the headstock onto the column:

1. Set the top piece of the headstock styrofoam packing approximately six feet away from the column/base assembly.
2. Remove the headstock from the box and place it on the styrofoam packing piece you laid out in **Step 1**.

Note: To avoid damaging the machine, be careful not to hold the headstock by the switch or the top part of the belt cover when lifting.

3. Carefully lay the column/base on its side.
4. Slide the column all the way into the bottom of the headstock (approximately 4"-6").



5. Tilt the entire assembly up (see **Figure 12**) and carefully position the drill press on its base in the fully upright position.

⚠ CAUTION

If the base starts to slide when tilting, you **MUST** have a third person prevent the base from sliding to avoid personal injury or machine damage.



Figure 12. Tilting drill press upright.

6. Center a ruler or tape on the base, and suspend a plumb bob from the center of the headstock spindle.
7. Center the headstock directly over the base as indicated by the plumb bob and ruler, as shown in **Figure 13**.

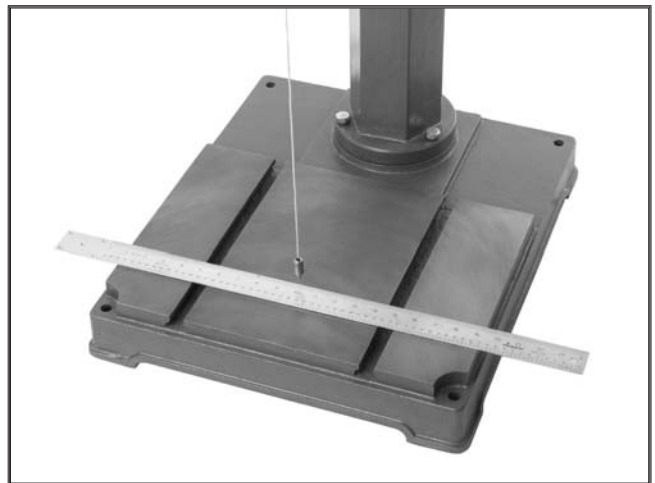


Figure 13. Aligning headstock with base.

8. Tighten the two headstock set screws to the column, as shown in **Figure 14**.

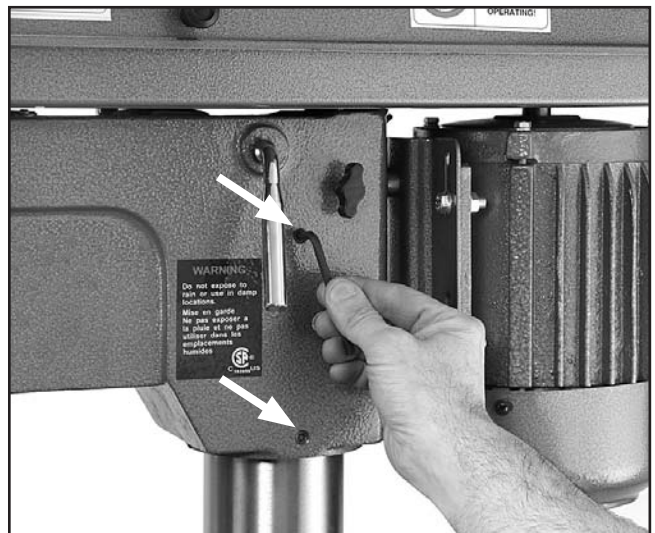


Figure 14. Securing headstock to column.



Drill Chuck & Arbor

The drill chuck attaches to the spindle by means of the arbor, shown in **Figure 15**. Matched tapers on the arbor and the inside of the chuck create a semi-permanent assembly when properly joined.

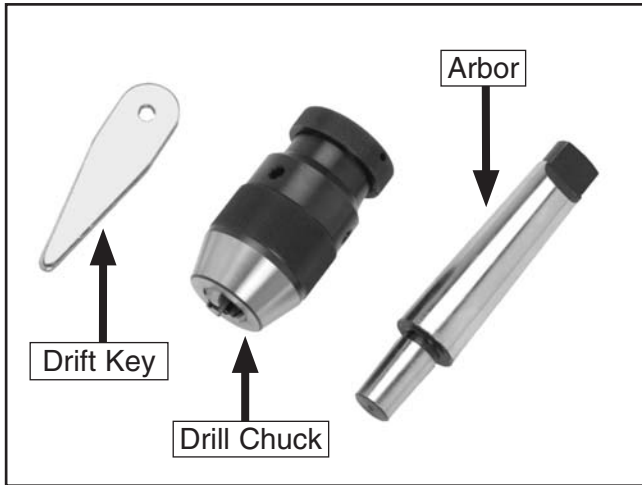


Figure 15. Chuck components.

Components and Hardware Needed:	Qty
Keyless Chuck.....	
Arbor.....	1

To assemble the drill chuck and mount it to the spindle:

1. Use mineral spirits to thoroughly clean the drill chuck and arbor, and dry all surfaces before assembly. Follow all safety warnings on the container of mineral spirits. **Failure to clean the mating surfaces may cause the tapered fit to loosen during operation, resulting in separation, which could lead to serious injury.**
2. Hand-turn the chuck to adjust the chuck jaws until they are inside the drill chuck body.
3. Place the drill chuck face down on a workbench. The arbor has a short taper and a long taper. Place the short taper into the socket in the back of the drill chuck and tap it with a rubber or wooden mallet, as shown in **Figure 16**. If the chuck fails to remain secure on the arbor, repeat **Steps 1 & 2**.

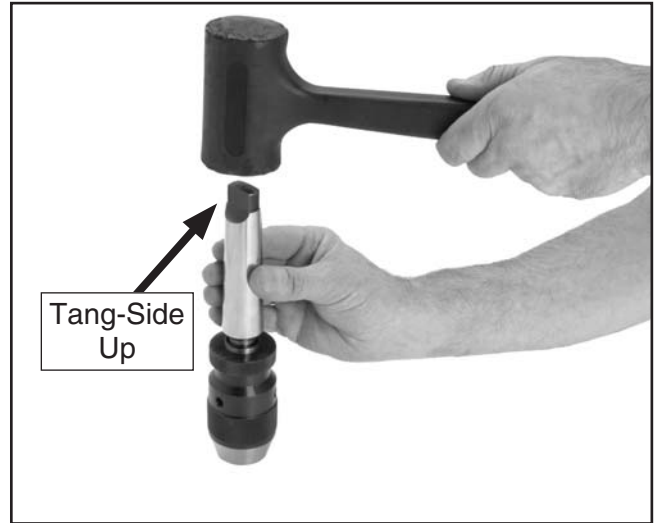


Figure 16. Seating arbor into chuck.

4. Slide the arbor into the spindle socket while slowly rotating the drill chuck. The socket has a rectangular pocket where the tang (or flat portion of the arbor shown in **Figure 16**) fits into.
5. Seat the chuck with a rubber mallet, as shown in **Figure 17**.

⚠ CAUTION

DO NOT use a steel hammer on the drill chuck to seat the arbor into the spindle. You will damage the chuck and/or spindle, which may make them unusable or unsafe.



Figure 17. Seating arbor and chuck into spindle.



Chuck Guard

Components and Hardware Needed:	Qty
Chuck Guard Assembly	1

The chuck guard must be installed before the drill press is operated.

To install the chuck guard:

1. Fit the chuck guard onto the spindle so that it sits flush below the depth stop bracket.
2. Tighten the included Phillips head screw and hex nut.

Downfeed Handles & Belt Cover Knob

Components and Hardware Needed:	Qty
Downfeed Handles	3
Downfeed Handle Knobs.....	3
Belt Cover Knob	1

The downfeed handles must be installed to operate the drill press.

To install the downfeed handles:

1. Thread the downfeed handle knobs onto the handles, and thread the downfeed handles into the pinion hub, as shown in **Figure 18**.

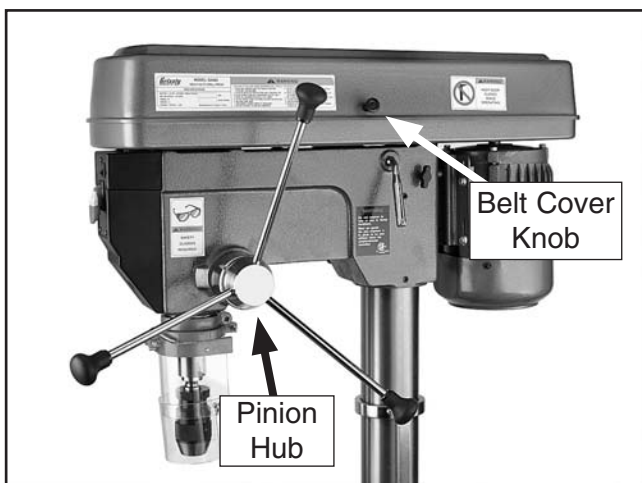


Figure 18. Downfeed handles installed.

2. Remove the screw that fastens the belt cover in place and install the belt cover knob in its place (see **Figure 18** for location).

Table

Components and Hardware Needed:	Qty
Hex Nuts M14-2.....	2
Flat Washers 14mm.....	2

The table is a very heavy object, and we strongly recommend that an assistant help with this portion of the setup process.

To install the table:

1. Place the table against the table bracket, so that the mounting studs pass through the mounting holes of the table.
2. Attach the table to the table bracket with the flat washers and hex nuts, and hand-tighten. The table should be able to tilt left and right, but the table surface should remain perpendicular to the column at all times.
3. Align the table so that the table tilt gauge reads 0°, as shown in **Figure 19**.

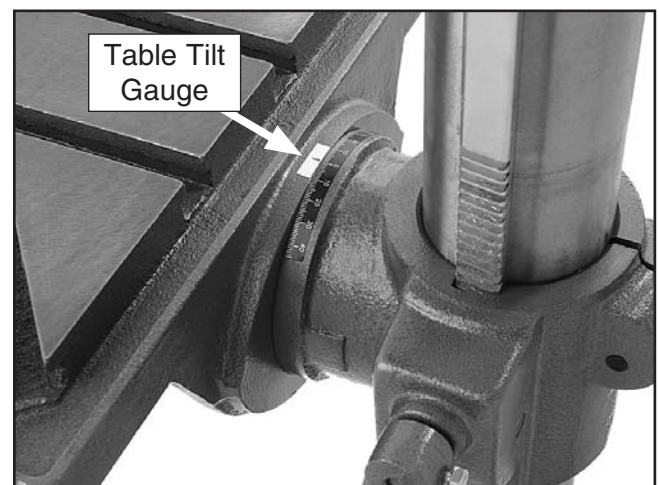


Figure 19. Adjusting the table tilt.

4. Tighten the hex bolts with a 22mm wrench.



Light (110V Only)

Components and Hardware Needed: Qty
60 W Light Bulb..... 1

The Model G0482 includes a light socket, intended for 110V usage only. When the drill press is shipped from the factory, a dust plug is installed in the light socket for protection.

To install a light bulb in the drill press:

1. Remove the dust plug from the light socket.
2. Install a 60W or smaller light bulb in the location shown in **Figure 20**.

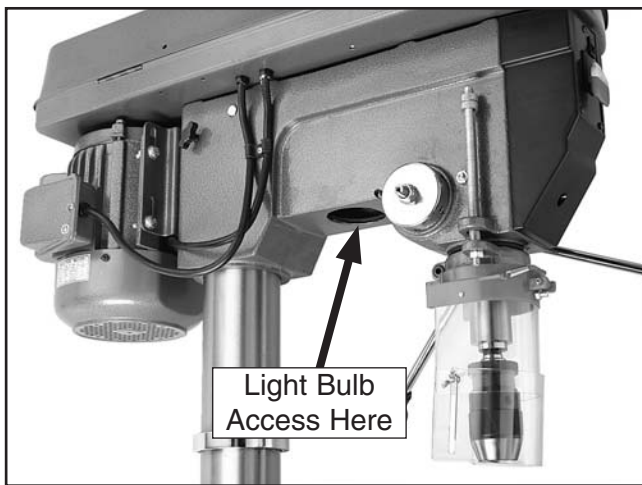


Figure 20. Light bulb access location.

⚠ CAUTION

Using light bulbs at 220V will destroy or explode the light bulbs because the light socket is not wired or intended to be wired for 220V.

Test Run

Once assembly is complete, you are ready to test run the drill press.



To test run the drill press:

1. Connect the drill press to the power source.
2. With your finger poised on the paddle switch (in case there is a problem), turn the drill press **ON**. The drill press should run smoothly, with little or no vibration or rubbing noises.

Investigate and correct for strange or unusual noises before operating the machine further.

If you cannot easily locate the source of a potential problem, refer to **Troubleshooting** on **Page 34**. If you still can't solve the problem, contact our Technical Support at (570) 546-9663.



Floor Mounting

Once you have confirmed that your machine is running properly, we strongly recommend mounting it to the floor to ensure optimum stability.

Lag shield anchors with lag bolts and anchor studs (**Figure 21**) are two popular methods for anchoring an object to a concrete floor. We suggest you research the many options and methods for mounting your machine and choose the best that fits your specific application.

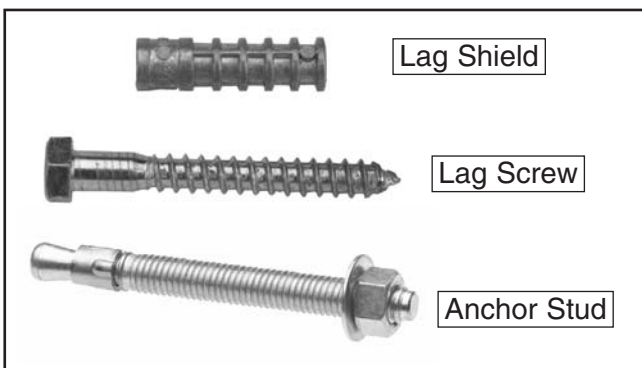


Figure 21. Typical concrete mounting hardware.

Mobile Base Mounting

Because the drill press is top-heavy by nature, we recommend mounting it to the floor, rather than a mobile base.

If you must use a mobile base, ALWAYS mount your drill press to a base plate inside of the mobile base, as shown in **Figure 23**.

A good quality base plate increases the standard footprint of the drill press to make it much more stable. The base plate must be at least 1½" thick and made of plywood (do not use OSB, MDF, or particle board) to hold the weight of the drill press. A common way for making the baseplate is described in this sub-section.

Always use extreme care when moving the drill press around with the mobile base!

⚠ CAUTION

If a mobile base is to be used, the drill press must be securely attached to both a large-footprint baseplate and mobile base. Failure to use a base plate greatly increases possibility of tipping and personal injury.

Needed Materials for Base Plate	Qty
Plywood ¾" x 23¾" x 23¾"	2
Wood Glue	As Needed
Wood Screws #6 x 1¼"	24

To make and use the base plate:

1. Glue the two pieces of plywood together, and align the edges and corners so the two boards make one thick piece.
2. Use the wood screws to fasten the boards together from both sides.
3. Allow 24 hours for the glue to dry before placing the drill press on it.
4. Place the base plate on the mobile base.
5. Drill holes through the base plate and the metal plates at the corners of the mobile base.
6. Secure the base plate to the mobile base with 2¼" long hex bolts, hex nuts, flat washers and lock washers, as shown in **Figure 22**.

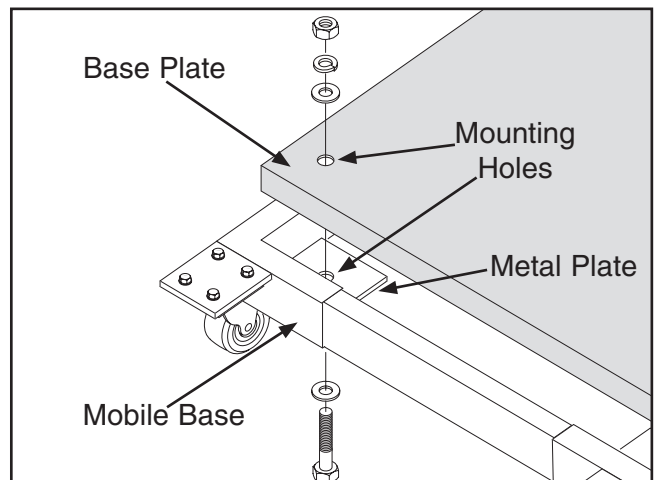


Figure 22. Mounting base plate to mobile base.

Continued on next page →



7. Place the drill press on the base plate.
8. Position the drill press close to the front of the mobile base, so the mobile base will not be a tripping hazard.
9. Mount the drill press to the base plate with lag screws and flat washers (**Figure 23**); or with through bolts, flat washers, and hex nuts.



Figure 23. Drill press mounted on mobile base, using a base plate for support.

Recommended Adjustments

For your convenience, the adjustments listed below have been performed at the factory; however, because of the many variables involved with shipping, we recommend that you at least verify the following adjustments before operating your machine—this will ensure that you know the operating tolerances of your machine, and you have them adjusted to your expectation.

Step-by-step instructions for these adjustments can be found in **SECTION 7: SERVICE**.

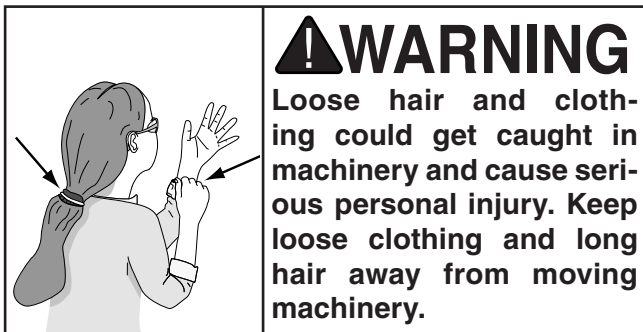
Factory adjustments that should be verified:

1. Depth Stop Calibration (**Page 36**)
2. Feed Shaft Spring Tension (**Page 36**)



SECTION 4: OPERATIONS

Operational Safety



NOTICE

If you have never used this type of machine or equipment before, WE STRONGLY RECOMMEND that you read books, trade magazines, and/or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

Switch Safety Key

To disable the switch, remove the safety key, as shown in **Figure 24**.

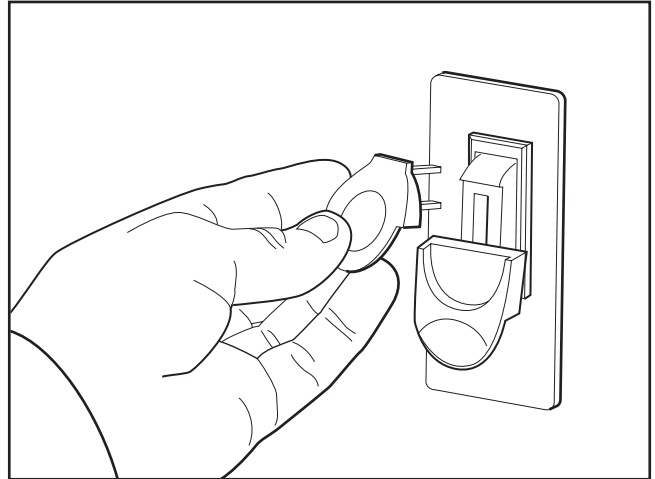


Figure 24. Removing key to disable machine.

Installing/Removing Drill Bits

The G0482 is equipped with a keyless chuck. This means that it can be opened and securely closed by hand with little effort. Any drill bit you install in the chuck must be tight enough that it will not come loose during operation.

To install a drill bit:

1. UNPLUG THE DRILL PRESS!
2. Flip up the chuck guard to gain access to the chuck.
3. Open the drill chuck wide enough to accept the shank of the drill bit.




4. Insert the drill bit as far as possible into the chuck **WITHOUT** allowing the chuck jaws to touch the fluted portion of the bit, and hand tighten the chuck.

Note: Make sure small bits are not trapped between the edges of two jaws; if they are, reinstall the drill bit or it will not be secure enough to use for drilling.

5. Once you are sure the bit is installed correctly, tighten the chuck as tight as possible.
6. Flip the chuck guard down into place.

To remove a drill bit:

1. **UNPLUG THE DRILL PRESS!**
2. Flip up the chuck guard to gain access to the chuck.
3. Open the drill chuck by hand, and catch the drill bit with a rag to protect your hands.

 CAUTION

Larger bits turning at slower speeds tend to grab the workpiece aggressively. This can result in the operator's hand being pulled into the bit or the workpiece being thrown with great force. Always clamp the workpiece to the table to prevent injuries.

Choosing Speeds

Using the Drill Bit Speed Chart

The chart shown on Page 26 is intended as a guide only. Always follow manufacturer's speed recommendations if provided with your drill bits, cutters, or hole saws. Exceeding the recommended speeds may be dangerous to the operator.

The speeds shown here are intended to get you started. The optimum speed will always depend on various factors, including tool diameter, drilling pressure, material hardness, material quality, and desired finish.

Often, when drilling materials other than wood, some type of lubrication is necessary.

Lubrication Suggestions

Wood	None
Plastics	Soapy Water
Brass	Water-Based Lubricant
Aluminum.....	Paraffin-Based Lubricant
Mild Steel.....	Oil-Based Lubricant



Twist/Brad Point Drill Bits	Soft Wood	Hard Wood	Plastic	Brass	Aluminum	Mild Steel
1/16" – 3/16"	3000	2500	2500	2500	3000	2500
13/64" – 3/8"	2000	1500	2000	1250	2500	1250
25/64" – 5/8"	1500	750	1500	750	1500	600
11/16" – 1"	750	500	1000	400	1000	350
Spade/Forstner Bits	Soft Wood	Hard Wood	Plastic	Brass	Aluminum	Mild Steel
1/4" – 1/2"	2000	1500				
9/16" – 1"	1500	1250				
1-1/8" – 1-7/8"	1000	750				
2–3"	500	350				
Hole Saws	Soft Wood	Hard Wood	Plastic	Brass	Aluminum	Mild Steel
1/2" – 7/8"	500	500	600	600	600	500
1" – 1-7/8"	400	400	500	500	500	400
2" – 2-7/8"	300	300	400	400	400	300
3" – 3-7/8"	200	200	300	300	300	200
4" – 5"	100	100	200	200	200	100
Rosette Cutters	Soft Wood	Hard Wood	Plastic	Brass	Aluminum	Mild Steel
Carbide Insert Type	350	250				
One-Piece Type	1800	500				
Tenon/Plug Cutters	Soft Wood	Hard Wood	Plastic	Brass	Aluminum	Mild Steel
3/8" – 1/2"	1200	1000				
5/8" – 1"	800	600				

Figure 25. Drill bit speed chart.

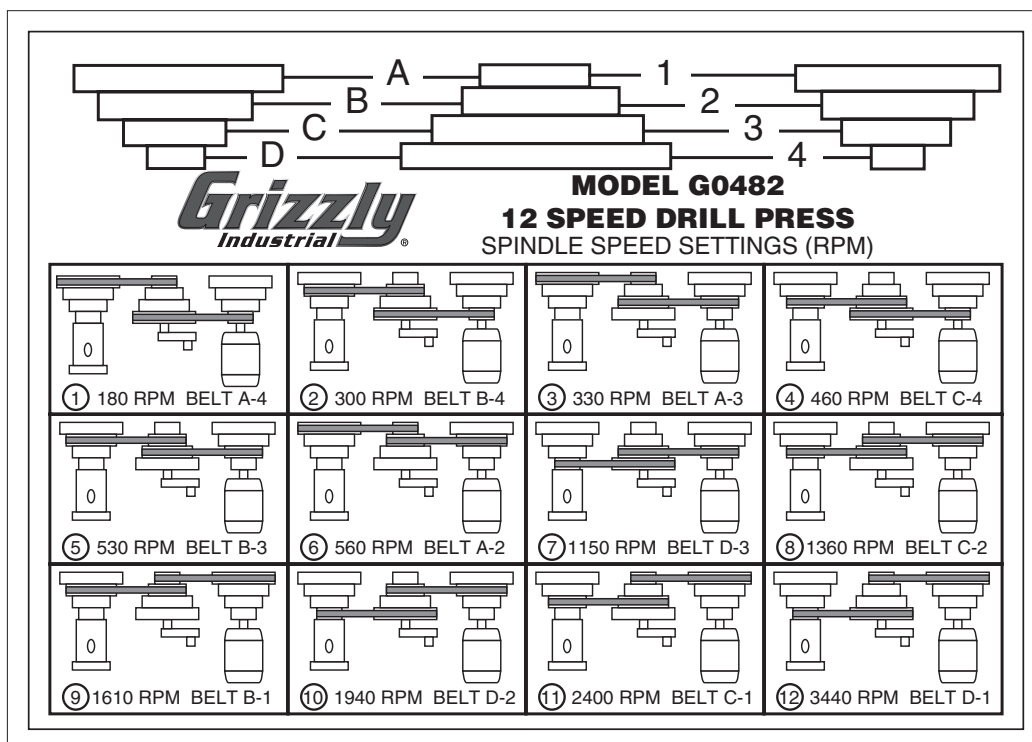


Figure 26. Belt configuration and speed settings.



Changing Speeds

The belts in the head of the drill press must be rearranged to change speeds. A chart under the belt cover shows the belt positions needed to make the drill press run at the desired speed.

To change speeds:

1. UNPLUG THE DRILL PRESS!
2. Loosen the belt tension lock knobs (shown on Page 26) on both sides of the headstock, so the motor is free to move.

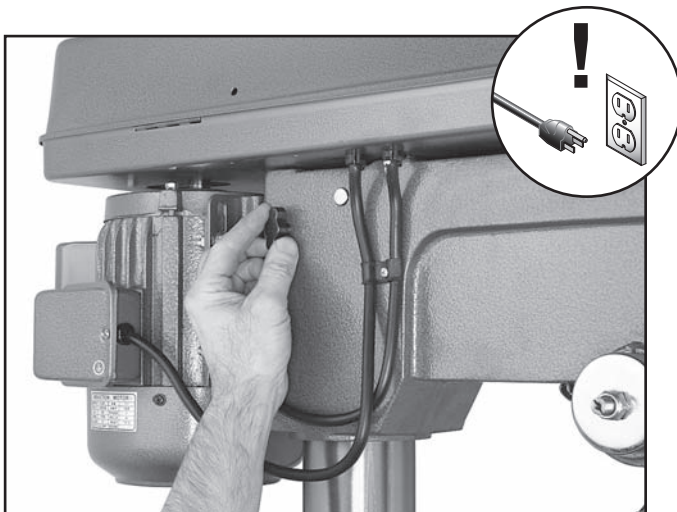


Figure 27. Loosening lock knob (both sides).

3. Rotate the belt tension lever counterclockwise, as shown in **Figure 28**, to take tension off the V-belts.

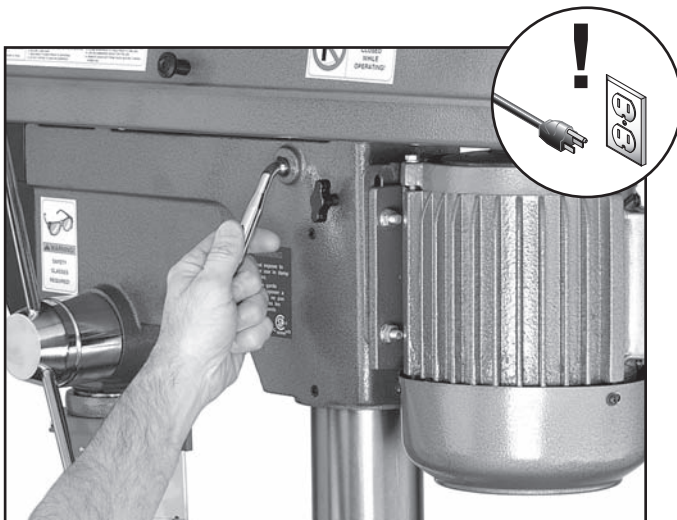


Figure 28. Using the belt tension lever.

4. Locate the desired speed on the speed chart under the belt cover or on Page 26 and move the V-belts to the desired V-grooves on the motor, idler, and spindle pulleys.

For Example: As indicated in the speed chart (**Figure 29**), a belt combination of **A-2** creates 560 RPM.

Note: Both belts may have to be removed before certain speed changes can be made.

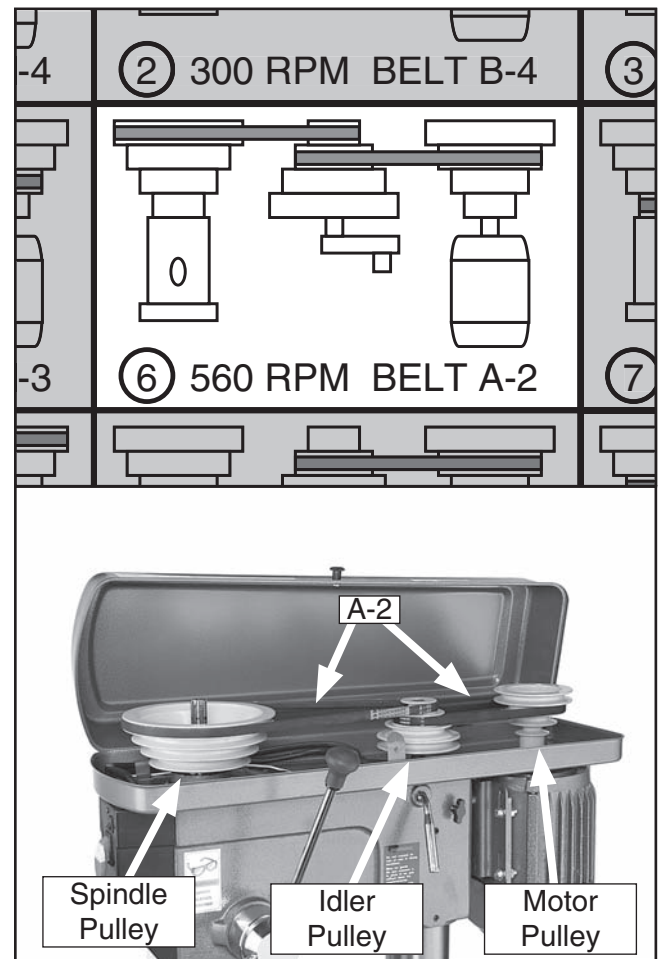


Figure 29. A-2 pulley combination for 560 RPM.

5. Rotate the belt tension lever until the belts are tight. Tighten both lock knobs.
6. Close the cover before plugging in the machine.



Drilling

The Model G0482 is designed for drilling holes in wood, plastics or metal. The basic operation of a drill press is lining up your drill bit with the intended hole location, turning the drill press **ON**, and using the downfeed handles to move the spinning drill bit into the workpiece.

For safe operation and optimum results, it is very important to follow these guidelines when drilling:

SECURING WORKPIECE TO TABLE: Secure the workpiece to the table or in a vise that is secured to the table before drilling.

CLEARING CHIPS: Raise the drill bit often to clear chips and cool the drill bit. This will ease the work of the drill press motor and extend the life of your drill bits.

PROTECTING TABLE: Protect the table by placing the workpiece on scrap wood. Also, use the depth stop so that the drill bit goes no deeper than necessary.

USING CORRECT SPEEDS: Use the correct speed for the diameter of the drill bit being used and the type of material being drilled. Refer to the **Drill Bit Speed Chart** on **Page 26** to help you choose the correct speed for your application.

LARGE DIAMETER BITS: Large diameter drill bits require slower spindle speeds.

SMALL DIAMETER BITS: Smaller diameter drill bits require faster spindle speeds.

HARD MATERIAL: The harder the material, (steel vs. wood) the slower the spindle speed.

SOFT MATERIAL: The softer the material, the faster the spindle may turn. (Plastics can melt at too high of a spindle speed!)

LUBRICANT: Use some form of lubricant on all materials except wood. Refer to **Lubrication Suggestions** on **Page 25** to find the correct lubrication for your application.

DRILLING ACCURACY: To prevent drill bit wandering and ensure accurate placement of holes, mark the hole location with a center punch before drilling. Also consider using a center-point drill to start the hole.

PLUG/ROSETTE CUTTERS: Plug cutters and rosette cutters are for wood only. However, carbide-tipped bits and cutters cut at a higher speed and can cut materials other than wood, depending on the cutter type.

5-FLUTE/2-FLUTE CUTTERS: Use a 5-flute cutter when cutting into plastics, brass, aluminum, and mild steel. A 2-flute cutter can aggressively grab the workpiece and damage the tool if used with materials other than wood.

SPADE BITS AND PLASTIC: When drilling plastic with a spade bit, use a spade bit with spurs.

HOLE SAWS: When using hole saws, apply firm and even pressure, so the saw teeth contact the surface all at the same time—not at an angle. You can also flip the workpiece and finish cutting from the other side.

CAUTION

Larger bits turning at slower speeds tend to grab the workpiece aggressively. This can result in the operator's hand being pulled into the bit or the workpiece being thrown with great force. Always clamp the workpiece to the table to prevent injuries.



Depth Stop

The Model G0482 has a depth stop that allows you to drill repeated non-through holes to the same depth every time.

The depth stop consists of a stud attached to the quill, with two knurled nuts that can be lowered or raised on the stud so the lower nut (depth nut) hits a stop bracket when the drill bit is lowered. The upper knurled nut (jam nut) is then used to tighten against the depth nut to secure it in place so the depth nut doesn't move with repeated operations. The depth stop also features a knurled return height nut that is used to set the minimum spindle return distance. **Figure 30** shows the various components of the depth stop.

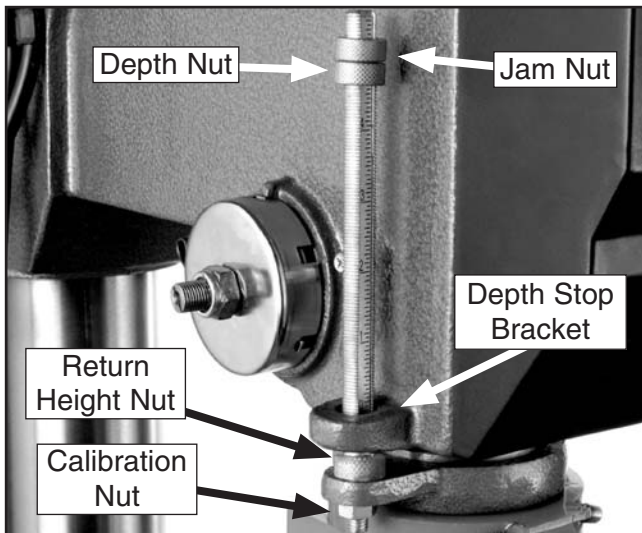


Figure 30. Depth stop components.

To set the depth stop:

1. Lower the drill bit to the required height.
2. Thread the depth nut down against the stop bracket.
3. Lower the jam nut against the depth nut.
4. Hold the depth nut in place and tighten the jam nut against the depth nut.

Note: The scale on the depth stop can be recalibrated if it gets moved or has changed since the factory setting. Refer to **Calibrating Depth Stop** on **Page 36** for instructions on how this is done.

To set the spindle return distance:

1. Lower the drill bit.
2. Thread the return height nut up the stud to the desired height.

Adjusting Table

The table can be raised and lowered, and tilted 90° left or right. Table adjustment controls are shown in **Figure 31**.

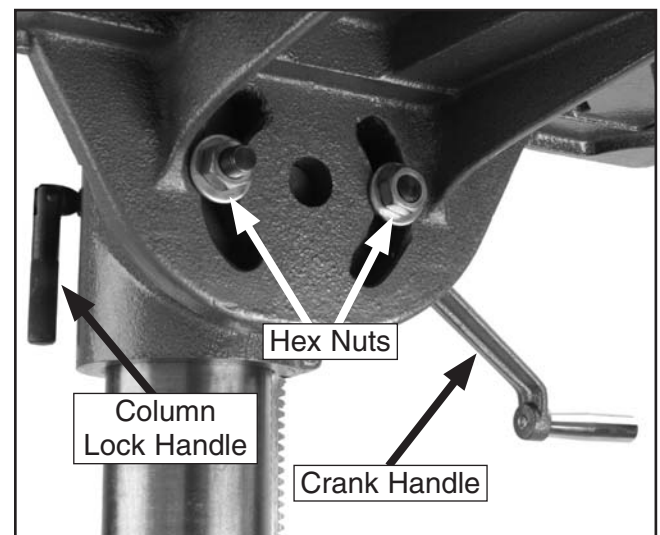


Figure 31. Table adjustment controls.

Table Height

1. Loosen the column lock handle.
2. Adjust the height by turning the crank handle.
3. Tighten the column lock handle.

Table Tilt

It is recommended that an assistant helps with the table tilt process, as the table is a very heavy object.

1. Loosen the hex nuts shown in **Figure 31** and tilt the table to the desired angle.
2. Tighten the hex nuts.



Arbor Removal

The arbor can be removed to install other Morse Taper tooling in the spindle. A drift key is included to help remove the arbor or other tooling from the spindle. Usually, once the chuck and arbor have been properly mounted together, they are considered semi-permanent connections. (If you would like to install a different chuck, we recommend getting a new arbor for that chuck.)

To remove the drill chuck and arbor:

1. UNPLUG THE DRILL PRESS!
2. Rotate the downfeed handles until the drift key slot is exposed in the side of the quill.
3. Lock the quill height by tightening the height return nut against the depth stop bracket. The quill should not return up into the head casting when the height return nut is adjusted this way.
5. Flip up the chuck guard to gain access to the chuck.
6. Rotate the spindle until the inner drift key slot is aligned with the outer slot, as shown in **Figure 32**. You will see through the spindle when the slot is properly aligned.
7. Insert the drift key into the drift key slot, and allow the quill to rise and trap the drift key by loosening the return height nut slightly.



Figure 32. Both drift key slots aligned.

8. Hold the drill chuck with one hand, and tap on the drift key with a rubber or wooden mallet, as shown in **Figure 33**, until the chuck releases.
9. Hold a downfeed handle with one hand, and loosen the depth stop nut with the other hand.
10. Carefully retract the quill into the head stock.



Figure 33. Using drift key to remove arbor.



SECTION 5: ACCESSORIES

G8865— $\frac{1}{16}$ " - $\frac{1}{4}$ " Cobalt Alloy Drill Bits

13-Piece Set

G8866— $\frac{1}{16}$ "- $\frac{3}{8}$ " Steelex® Cobalt Alloy Drill Bits

21-Piece Set

G8867— $\frac{1}{16}$ "- $\frac{1}{2}$ " Steelex® Cobalt Alloy Drill Bits

29-PC Set

Cobalt Alloy bits will retain their edge sharpness longer than normal HSS bits, resulting in a significant saving of time and money in the workshop. Includes a heavy-gauge steel index case.



Figure 34. Model G8865 13-Piece Alloy Drill Bits.

G5753—Drill Press Vise 6"

If you use a drill press and value your fingers, you need one of these. Made from high-grade cast iron, these hefty horizontal vises offer support and stability, allowing you to keep your hands well away from fast moving bits and cutters.

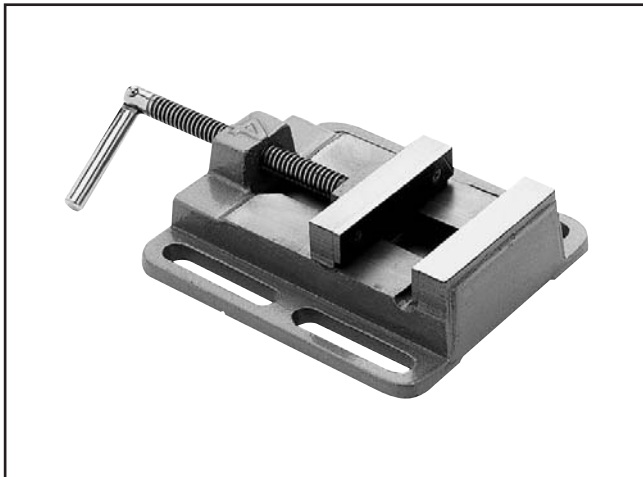


Figure 35. Model G5753 Drill Press Vise 6".

G7984—Face Shield

H1298—Dust Sealed Safety Glasses

H1300—UV Blocking, Clear Safety Glasses

H2347—Uvex® Spitfire Safety Glasses

H0736—Shop Fox® Safety Glasses

Safety Glasses are essential to every shop. If you already have a pair, buy extras for visitors or employees. You can't be too careful when it comes to shop safety!



Figure 36. Our most popular safety glasses.

G2500—20-Piece Regular Sanding Drum Set

Use on your drill press, lathe, or hand drill. This kit consists of 5 drums in popular $\frac{1}{2}$ " x $\frac{1}{2}$ ", $\frac{3}{4}$ " x 1", 1" x 1", $1\frac{1}{2}$ " x $1\frac{1}{2}$ ", and 2" x $1\frac{1}{2}$ " sizes. Comes with 50, 80 and 120 grit sizes for each drum.



Figure 37. Model G2500 Sanding Drum Set.



H7827—Drill Press Table

Add this 23³/₄" wide x 11⁷/₈" deep drill press table with 3" high fence and stop block to your drill press for greater work support and increased accuracy. The fence and stop block slide along T-slots for quick, yet secure set-up, and a removable 3⁵/₁₆" square center block allows through drilling past the table. Fits all standard drill press tables and includes two universal table clamps.

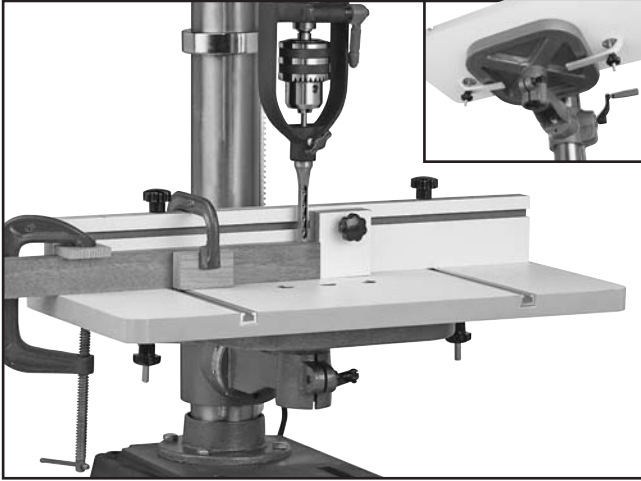


Figure 38. H7827 Drill Press Table.

H6238—Drill Press Support Rollers

These Drill Press Support Rollers provide stability and control for longer work. Rollers clamp to the column and measure 9¹/₂" wide x 1³/₈" diameter. Lateral adjustment range is 8" minimum to 24" maximum on each side and vertical adjustment is 8".



Figure 39. H6238 Drill Press Support Rollers.

H7789—Mortising Attachment Kit

This mortising attachment kit, with its variety of interchangeable bushings, will fit just about any drill press for boring precision mortises. The entire kit includes cast iron chisel holder and fence, hold down assembly, quill alignment pin, 1/4", 5/16", 3/8" and 1/2" chisels, 3 two-piece bushings, 3 split bushings and carrying case.



Figure 40. H7789 Mortising Attachment Kit.

G5562—SLIPIT® 1 Qt. Gel

G5563—SLIPIT® 12 oz Spray

G2871—Boeshield® T-9 12 oz Spray

G2870—Boeshield® T-9 4 oz Spray

H3788—G96® Gun Treatment 12 oz Spray

H3789—G96® Gun Treatment 4.5 oz Spray

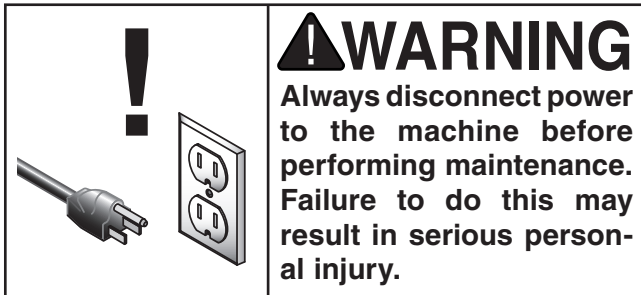


Figure 41. Recommended products for protecting unpainted cast iron/steel areas.

Call 1-800-523-4777 To Order



SECTION 6: MAINTENANCE



General

Regular periodic maintenance on your drill press will ensure optimum performance. Make a habit of inspecting your machine each time you use it. Check for the following conditions and repair or replace when necessary:

- Loose mounting bolts.
- Worn switch.
- Worn or damaged cords and plugs.
- Damaged V-belts.
- Any other condition that could hamper the safe operation of this machine.

Cleaning

Cleaning the Model G0482 is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it. Treat all unpainted cast iron and steel with a non-staining lubricant after cleaning.

Unpainted Cast Iron

Protect the unpainted cast iron surfaces by wiping them clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces.

Keep these surfaces rust-free with regular applications of products like G96® Gun Treatment, SLIPIT®, or Boeshield® T-9.

Lubrication

Since all bearings are shielded and permanently lubricated, simply leave them alone until they need to be replaced. DO NOT lubricate them.

Keep quill, spindle, column, and table top well lubricated to prevent rust.

V-Belts

Inspect regularly for tension and wear. Check pulleys to ensure that they are properly aligned. See **Changing Speeds** on **Page 25** for more information about removing/installing belts if you need help replacing the belts.

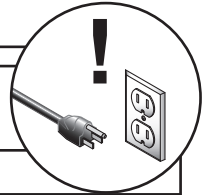


SECTION 7: SERVICE

About Service

Review the troubleshooting and procedures in this section to fix your machine if a problem develops. If you need replacement parts or you are unsure of your repair skills, then feel free to call our Technical Support at (570) 546-9663.

Troubleshooting

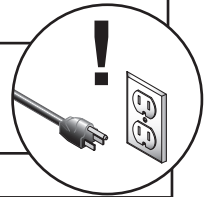


Motor & Electrical

Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	<ol style="list-style-type: none"> 1. Plug or receptacle is at fault or wired incorrectly. 2. Start capacitor is faulty. 3. Motor connection is wired incorrectly. 4. Power supply is faulty, or is switched OFF. 5. Safety switch key is at fault. 6. ON/OFF switch is faulty. 7. Cable or wiring is open or has high resistance. 8. Motor is at fault. 	<ol style="list-style-type: none"> 1. Test power plug and receptacle for good contact and correct wiring. 2. Replace capacitor. 3. Correct motor wiring (see Page 39). 4. Make sure all hot lines and grounds are operational and have correct voltage on all legs. 5. Install or replace safety key, or replace switch assembly. 6. Replace faulty switch. 7. Troubleshoot wires for internal or external breaks, check for disconnected or corroded connections and repair or replace wiring. 8. Test, repair or replace motor.
Machine stalls or is underpowered.	<ol style="list-style-type: none"> 1. Incorrect spindle speed for task. 2. Machine is undersized for the task. 3. Bit or cutter is dull. 4. Low power supply voltage. 5. Belt(s) is slipping. 6. Plug or receptacle is at fault. 7. Motor connection is wired incorrectly. 8. Pulley is slipping on shaft. 9. Motor bearings are at fault. 10. Motor has overheated. 11. Motor is at fault. 	<ol style="list-style-type: none"> 1. Decrease spindle speed. 2. Use smaller drill bits/cutters and reduce feed rate and spindle speed. 3. Sharpen/replace bit or cutter. 4. Make sure hot lines and grounds are operational w/correct voltage. 5. Replace bad belts, align pulleys, and re-tension. 6. Test power plug and receptacle for good contact and correct wiring. 7. Correct motor wiring (see Page 39). 8. Replace loose pulley and shaft. 9. Rotate motor shaft for noisy or burnt bearings, repair/replace as required. 10. Clean inside/outside of motor, let cool, and reduce workload on machine. 11. Test, repair or replace motor.



Symptom	Possible Cause	Possible Solution
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> 1. Motor or component is loose. 2. Belts are slapping belt cover. 3. V-belt(s) is worn or is loose. 4. Motor fan is rubbing on fan cover. 5. Pulley is loose. 6. Machine is incorrectly mounted to the floor, or the floor is uneven. 7. Chuck or cutter is at fault. 8. Motor bearings are at fault. 9. Spindle bearings at fault. 	<ol style="list-style-type: none"> 1. Inspect, replace for damaged bolts/nuts and retighten with thread locking fluid. 2. Replace/realign belts with a new matched set, and retension belts (refer to Page 27). 3. Replace belts. 4. Replace/repair dented fan cover, and replace loose or damaged fan. 5. Remove pulley, replace with key as required, and re-install securely. 6. Make sure floor mounting hardware is tight; place shims under machine. 7. Replace out-of-round chuck, replace or resharpen cutter, use appropriate feed rate and cutting RPM. 8. Check bearings, replace motor or bearings as required. 9. Replace bearing.



Drill Press Operations

Symptom	Possible Cause	Possible Solution
Drilling stops, but the motor still operates.	<ol style="list-style-type: none"> 1. The belt is loose or worn. 2. The pulley for the spindle shaft or the motor is slipping on the shaft. 3. Bit slips in chuck. 	<ol style="list-style-type: none"> 1. Replace and/or adjust the belt. 2. To resecure the pulley: <ol style="list-style-type: none"> a. UNPLUG THE DRILL PRESS. b. Remove set screw on slipping pulley. c. Align flats on the pulley shaft with set screw hole. d. Reinstall and tighten the set screw. 3. Tighten bit; inspect bit for burrs or other obstructions that might interfere with clamping surface.
The chuck wobbles or is loose on the spindle shaft.	<ol style="list-style-type: none"> 1. Foreign material is stuck between the chuck-to-spindle mating surface. 2. Damaged chuck. 	<ol style="list-style-type: none"> 1. Remove the chuck and clean and deburr the tapered chuck and spindle mating surfaces, then reassemble. 2. Replace.
The spindle does not retract completely in the uppermost position or it binds.	<ol style="list-style-type: none"> 1. The quill shaft is gummy with sawdust and oil. 2. The feed shaft return spring is weak. 3. The quill deflection screw is binding the quill. 	<ol style="list-style-type: none"> 1. Clean the gummy substance with penetrating oil and lubricate with a light coat of oil. 2. Increase the feed shaft return spring tension as described on Page 36. 3. Loosen jam nut, and slightly turn out screw where the quill binds. Retighten jam nut and recheck for binding and looseness at all spindle locations.
The quill has excessive deflection.	<ol style="list-style-type: none"> 1. The quill shaft is at fault. 2. The quill and/or bearings are worn. 	<ol style="list-style-type: none"> 1. Adjust the quill screw. 2. Replace the quill and/or bearings.
Holes drilled at an angle.	<ol style="list-style-type: none"> 1. Table is not at 90 degrees. 	<ol style="list-style-type: none"> 1. Adjust table angle (see Page 29).
Drill bit wobbles, holes are oversized.	<ol style="list-style-type: none"> 1. Drill bit installed incorrectly. 	<ol style="list-style-type: none"> 1. Remove drill bit and reinstall.



Depth Stop Calibration

The drill press comes fitted with a depth stop to use when drilling multiple holes at the same depth. The scale on this depth stop can be calibrated if it ever becomes incorrect.

To calibrate the depth stop:

1. Loosen the calibration nut shown in **Figure 42**.

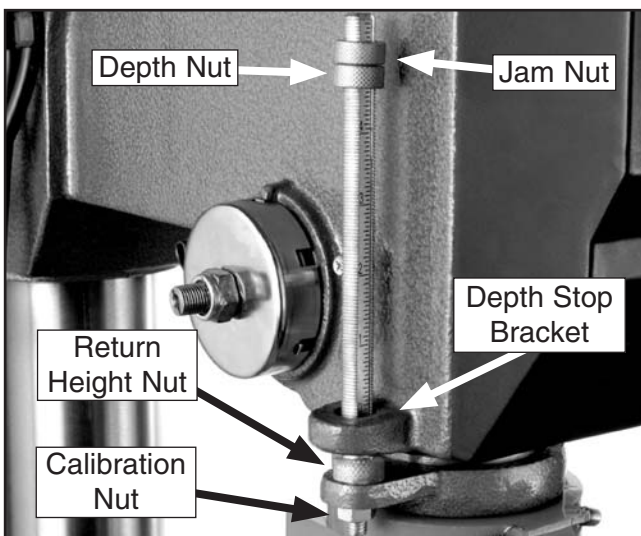


Figure 42. Depth stop assembly.

2. Set the depth nut to zero, and secure it with the jam nut.
3. Tighten the calibration nut to hold the depth stop in position.
4. Move the depth nut and jam nut to a non-zero measurement to allow the spindle to move.
5. Test the depth stop by measuring how far the spindle actually moves with respect to where you set the depth stop.

Feed Shaft Spring Tension

The feed shaft return spring is adjusted at the factory; however, during the life of the drill press you may want to adjust the feed shaft return spring so the feed shaft return pressure suits your operating needs.



To adjust the feed shaft spring tension:

1. UNPLUG THE DRILL PRESS!
2. Wipe off any oil on the spring lock cover so it does not slip in your fingers when you hold the cover from spinning (see **Figure 43** for spring lock cover identification).

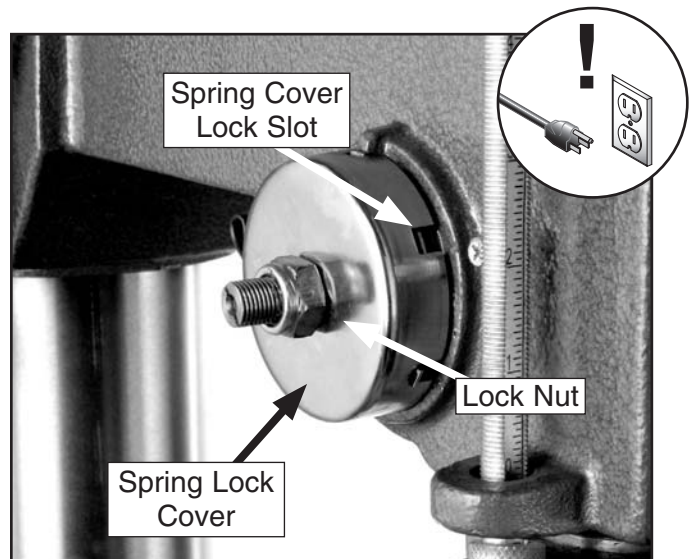


Figure 43. Return spring assembly.



- Put on heavy leather gloves to protect your hands from possible injury if the spring uncoils during the next step.

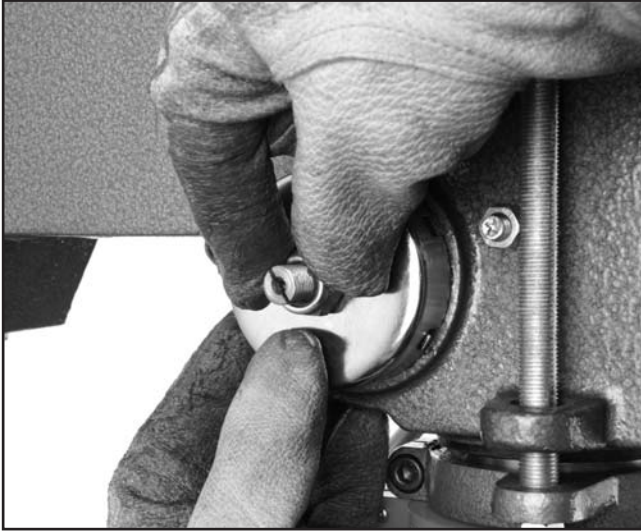


Figure 44. Loosening cover and jam nut.

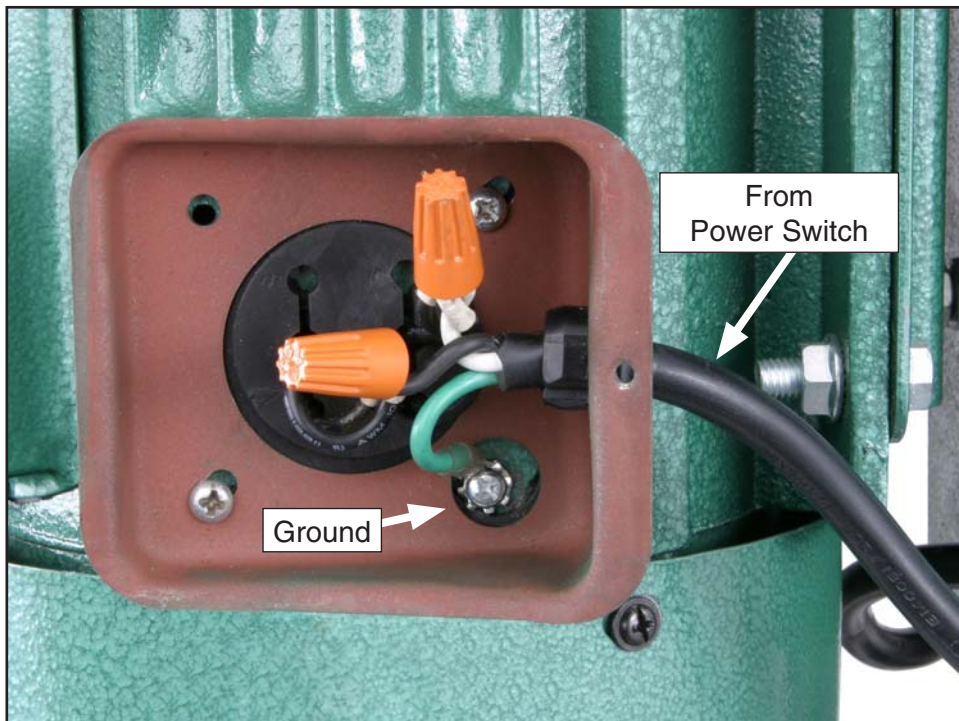
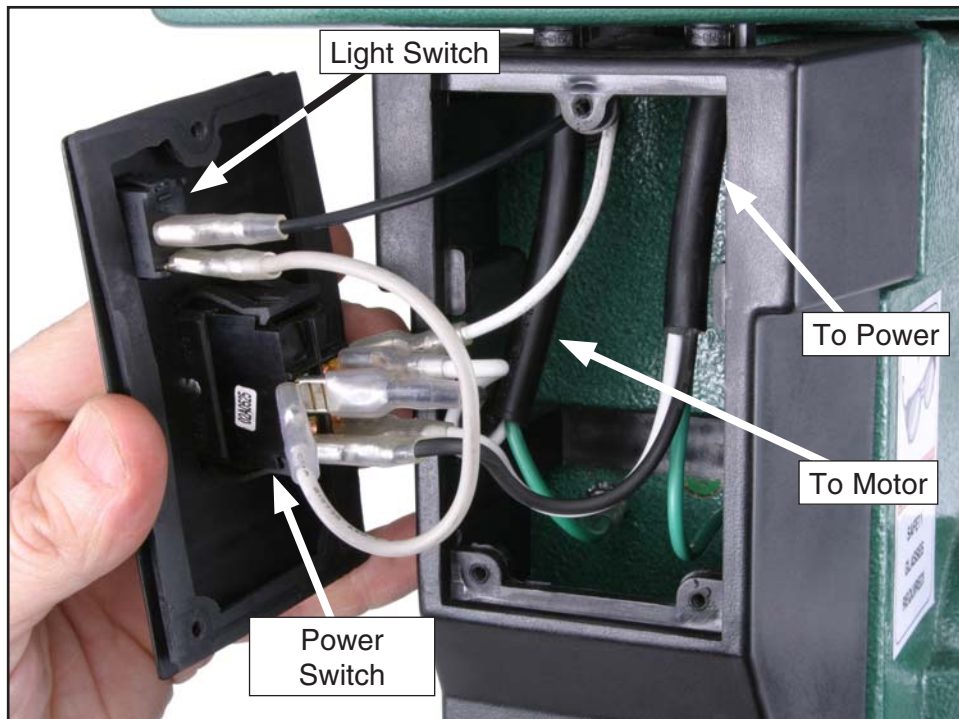
CAUTION

A high tension coiled spring is underneath the cover. Put on heavy leather gloves to protect your hands from possible injury when removing the cover.

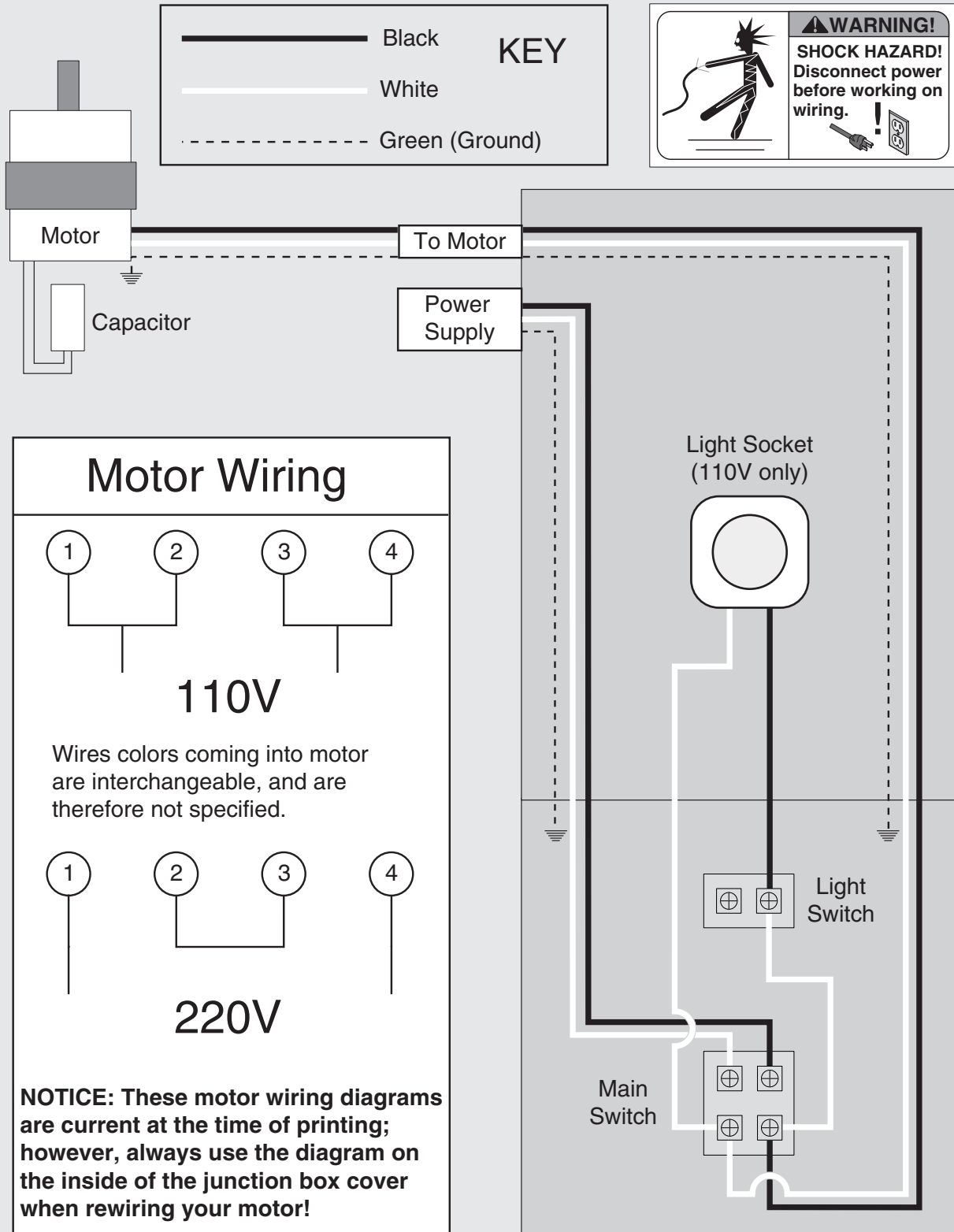
- While holding the spring lock cover against the side of the head stock so the cover stays splined with the locking lug; loosen the jam nut and cover nut approximately $\frac{1}{4}$ " (see Figure 44).
- Pull the cover outward just enough to disengage the spring-cover lock slot from the locking lug.
Note: It is important to keep a good grip during this step. Letting go of the cover will cause the spring to rapidly uncoil, which could cause serious injury!
- Rotate the cover counterclockwise to increase spring tension, or let the cover slowly unwind in the clockwise direction to reduce spring tension.
- Engage the next available spring-cover lock slot with the locking lug and hold the spring cover tightly against the side of the head stock.
- Tighten the lock nut against the spring cover just until the nut stops, and then back off the nut approximately $\frac{1}{8}$ turn, or just enough so there is no binding at complete spindle travel.



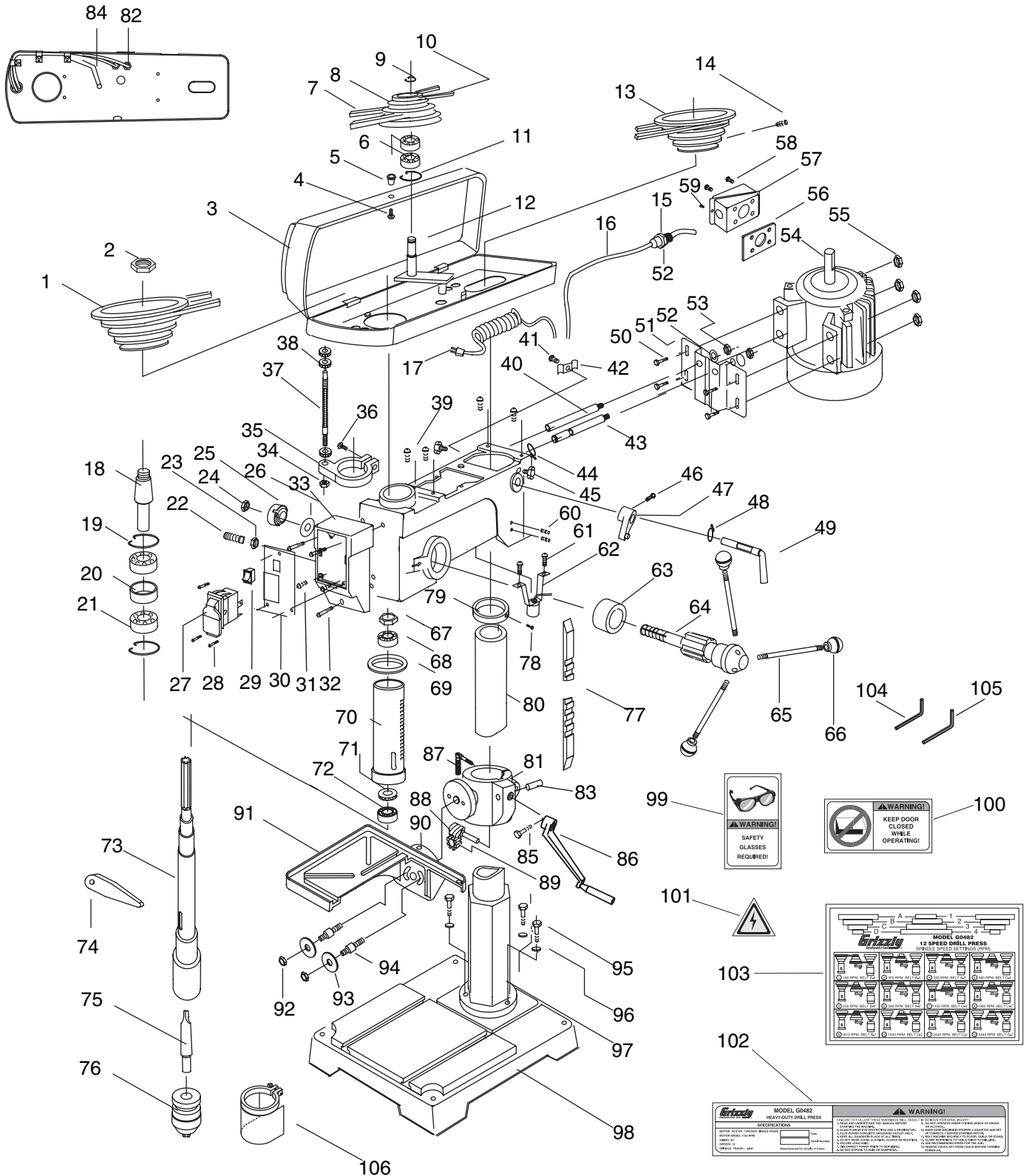
Electrical Components



Wiring Diagram



Parts Breakdown



Parts List

REF	PART #	DESCRIPTION
1	P0482001	SPINDLE PULLEY
2	P0482002	HEX NUT M33-1.5 LH
3	P0482003	PULLEY COVER
4	PS68M	PHLP HD SCR M6-1 X 10
5	P0482005	COVER KNOB M6-1
6	P6203	BEARING 6203ZZ
7	PVA25	V-BELT A-25
8	P0482008	MIDDLE PULLEY
9	PR54M	INT RETAINING RING 15MM
10	PVA40	V-BELT A-40
11	PR74M	INT RETAINING RING 45MM
12	P0482012	SHAFT ASSEMBLY
13	P0482013	MOTOR PULLEY
14	PSS01M	SET SCREW M6-1 X 10
15	P0482015	STRAIN RELIEF
16	P0482016	MOTOR CORD
17	P0482017	CORD WITH PLUG
18	P0482018	PULLEY INSERT
19	PR75M	INT RETAINING RING 66MM
20	P0482020	BEARING SPACER
21	P6007	BEARING 6007ZZ
22	PSS87M	SET SCREW M8-1.25 X 28
23	PN03M	HEX NUT M8-1.25
24	PLN09M	LOCK NUT M12-1.75
25	P0482025	COIL SPRING & CAP
26	PW22M	FLAT WASHER 65MM
27	G8988	PADDLE SWITCH
28	PS74M	PHLP HD SCR M4-.7 X 14
29	P0482029	LIGHT SWITCH
30	P0482030	SWITCH PLATE
31	PS74M	PHLP HD SCR M4-.7 X 14
32	PS09M	PHLP HD SCR M5-.8 X 10
33	P0482033	SWITCH BOX
34	PN03M	HEX NUT M8-1.25
35	P0482035	DEPTH STOP BRACKET
36	PS04M	PHLP HD SCR M8-1.25 X 20
37	P0482037	POST DEPTH STOP
38	P0482038	DEPTH STOP NUT M12-1.75
39	PS68M	PHLP HD SCR M6-1 X 10
40	P0482040	MOTOR BRACKET SUPPORT
41	PS09M	PHLP HD SCR M5-.8 X 10
42	P0482042	CORD CLAMP
43	P0482043	MOTOR BRACKET SUPPORT
44	PR05M	EXT RETAINING RING 15MM
45	P0482045	WING SCREW M10-1.5 X 32
46	PS39M	PHLP HD SCR M8-1.25 X 10
47	P0482047	ADJUSTING LEVER
48	PR02M	EXT RETAINING RING 14MM
49	P0482049	LEVER SHAFT
50	PB07M	HEX BOLT M8-1.25 X 25
51	P0482051	MOTOR PLATE
52	PLW05M	LOCK WASHER 12MM
53	PN09M	HEX NUT M12-1.75

REF	PART #	DESCRIPTION
54	P0482054	MOTOR
55	PN03M	HEX NUT M8-1.25
56	P0482056	RUBBER SEAL
57	P0482057	JUNCTION BOX
58	PS05M	PHLP HD SCR M5-.8 X 8
59	PS17M	PHLP HD SCR M4-.7 X 6
60	PSS13M	SET SCREW M10-1.5 X 12
61	PS09M	PHLP HD SCR M5-.8 X 10
62	P0482062	LAMP BRACKET
63	P0482063	SPACER
64	P0482064	PINION SHAFT
65	P0482065	DOWNFEED HANDLE M10-1.75
66	P0482066	DOWNFEED KNOB M10-1.75
67	PN41M	HEX NUT M25-2 LH
68	P6005	BEARING 6005ZZ
69	P0482069	QUILL BASKET
70	P0482070	QUILL
71	P51107	THRUST BEARING 51107
72	P6007	BEARING 6007ZZ
73	P0482073	SPINDLE
74	P0482074	DRIFT KEY
75	P0482075	ARBOR MT4/JT3
76	G8583	KEYLESS CHUCK 5/8" / JT3
77	P0482077	RACK
78	PS14M	PHLP HD SCR M6-1 X 12
79	P0482079	RACK COLLAR
80	P0482080	COLUMN
81	P0482081	TABLE BRACKET
82	P0482082	CORD PROTECTOR
83	P0482083	GEAR SHAFT
84	P0482084	CORD FOR LAMP
85	PB03M	HEX BOLT M8-1.25 X 16
86	P0482086	ADJUSTMENT HANDLE
87	P0482087	COLUMN LOCK HANDLE
88	P0482088	ELEVATING WORM
89	P0482089	HELICAL GEAR
90	P0482090	ZERO SCALE
91	P0482091	TABLE
92	PN32M	HEX NUT M14-2
93	PW10M	FLAT WASHER 14MM
94	P0482094	ARM STUD M14-2 X 63
95	PB33M	HEX BOLT M12-1.75 X 50
96	PLW05M	LOCK WASHER 12MM
97	P0482097	BASE FLANGE
98	P0482098	BASE
99	PLABEL-11	SAFETY GLASSES 2" X 3-5"/16"
100	P0482100	DOOR CLOSED HORIZONTAL
101	PLABEL-14	ELECTRICITY
102	P0482102	MACHINE ID LABEL
103	P0482103	SPEED CHART
104	PAW03M	HEX WRENCH 3MM
105	PAW05M	HEX WRENCH 5MM
106	P0482106	CHUCK GUARD ASSEMBLY



WARRANTY AND RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.





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<input type="checkbox"/> Handy	<input type="checkbox"/> Practical Homeowner	<input type="checkbox"/> Woodshop News
<input type="checkbox"/> Home Shop Machinist	<input type="checkbox"/> Precision Shooter	<input type="checkbox"/> Woodsmith
<input type="checkbox"/> Journal of Light Cont.	<input type="checkbox"/> Projects in Metal	<input type="checkbox"/> Woodwork
<input type="checkbox"/> Live Steam	<input type="checkbox"/> RC Modeler	<input type="checkbox"/> Woodworker West
<input type="checkbox"/> Model Airplane News	<input type="checkbox"/> Rifle	<input type="checkbox"/> Woodworker's Journal
<input type="checkbox"/> Modeltec	<input type="checkbox"/> Shop Notes	<input type="checkbox"/> Other:
<input type="checkbox"/> Old House Journal	<input type="checkbox"/> Shotgun News	

3. What is your annual household income?

\$20,000-\$29,000 \$30,000-\$39,000 \$40,000-\$49,000
 \$50,000-\$59,000 \$60,000-\$69,000 \$70,000+

4. What is your age group?

20-29 30-39 40-49
 50-59 60-69 70+

5. How long have you been a woodworker/metalworker?

0-2 Years 2-8 Years 8-20 Years 20+ Years

6. How many of your machines or tools are Grizzly?

0-2 3-5 6-9 10+

7. Do you think your machine represents a good value? Yes No

8. Would you recommend Grizzly Industrial to a friend? Yes No

9. Would you allow us to use your name as a reference for Grizzly customers in your area?
Note: We never use names more than 3 times. Yes No

10. Comments: _____

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